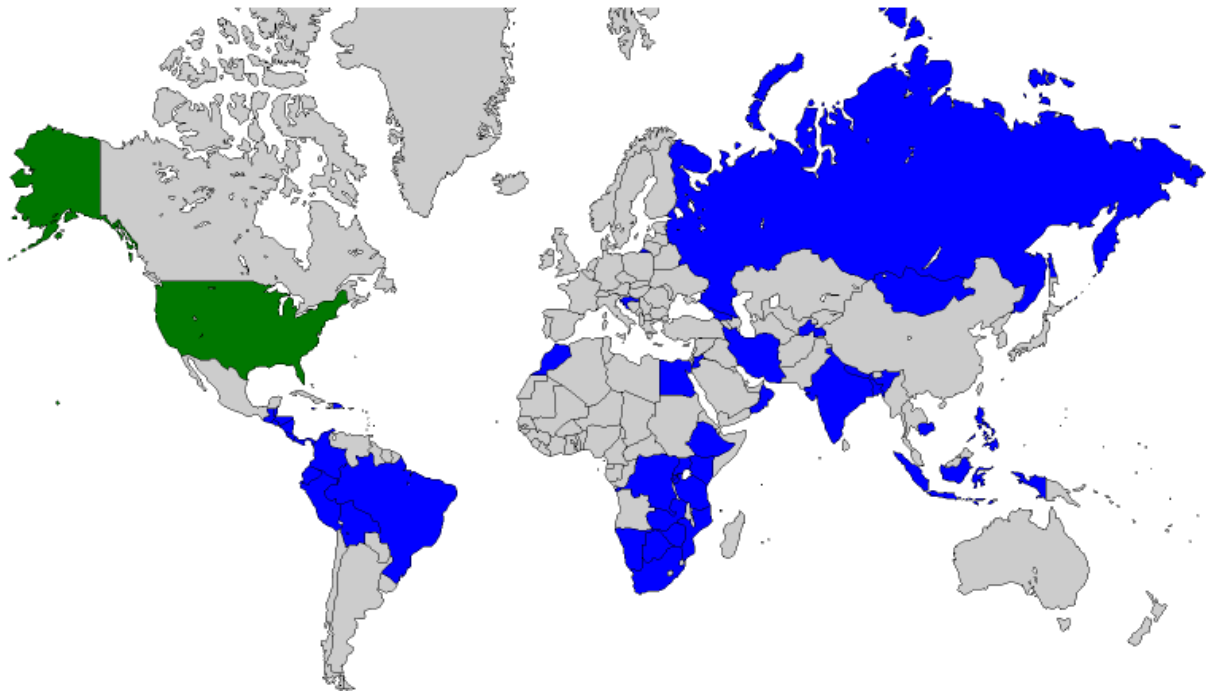


U. S. Department of the Interior International Technical Assistance Program



**Quarterly Report
Through December 30, 2009**

Prepared By: Barbara Pitkin, COTR
U.S. Department of the Interior

Award Numbers: DOS 1014 722637
AEG-T-00-06-00003
S-OES-06-IAA-0033
PASA 492-P-00-04-00033
MCC 05-0148-CFO
S-OES-08-IAA-0009

Date Issued: March 2010

U.S. Department of the Interior
Office of International Affairs
1849 C Street NW, MS 3530
Washington, DC 20240 U.S.A.
Fax: 202-501-6381
Website: <http://www.doi.gov/intl/itap>

Staff

Barbara Pitkin, Program Manager
Cynthia Perera, Project Manager
Patricia Bickley, Program Analyst
Tonya Savoy, Program Assistant

Email

barbara_pitkin@ios.doi.gov
cynthia_perera@ios.doi.gov
patricia_bickley@ios.doi.gov
tonya_savoy@ios.doi.gov

Telephone

(202) 208-5221
(202) 219-0537
(202) 219-0187
(202) 208-3624

U.S. Department of the Interior International Technical Assistance Program

Section I: International Technical Assistance Program Overview	4
Section II: Active Programs	6
Central America & the Caribbean	7
<i>Central America/Dominican Republic</i> • CITES Capacity Building	7
<i>Central America/Dominican Republic</i> • Mining Environmental Impact Assessments	31
<i>Guatemala</i> • Protected Area Management and Forestry Protection, Watershed Management, Biological Monitoring	34
<i>Eastern Caribbean</i> • Resource Protection	39
<i>Trinidad and Tobago</i> • Ecotourism	40
Russia, Europe & Eurasia	41
<i>Georgia</i> • Protected Areas Development, Phase II	41
Middle East & North Africa	47
<i>Jordan</i> • Cultural Resource Interpretation	47
<i>Middle East/North Africa</i> • CITES Capacity Building	52
Sub-Saharan Africa	62
<i>Africa</i> • Standardized Mapping and Geospatial Database	62
<i>West Africa</i> • Oil and Gas Regulation	66
<i>Cape Verde</i> • Baseline Groundwater Evaluation	68
<i>Kenya</i> • Natural Resource Management	73
<i>Mozambique</i> • Tourism Development	75
<i>Mozambique</i> • Water and Sanitation	76
<i>Tanzania</i> • Protected Area Management	78
Asia & the Pacific	86
<i>Mongolia</i> • Water Supply	86
<i>Philippines</i> • Environmental Law Enforcement	90
Section III: Completed Programs	104
Central America & the Caribbean	105
South America	110
Russia, Europe & Eurasia	114
Middle East & North Africa	118
Sub-Saharan Africa	121
Asia & the Pacific	125
<i>India</i> • Slope Stability and Coal Mining	125
Section IV: Contacts	130

Hold the 'control' key and left-click on [section](#), [sub-section](#), and [project](#) headings in the table above to move immediately to that portion of the report. In the report, hold the 'control' key and left-click on [section](#) headings or [sub-section](#) headings to return to this table of contents.

Section I: International Technical Assistance Program Overview

Established more than 150 years ago, the U.S. Department of the Interior (DOI) is the nation's principal conservation agency responsible for the management and protection of its most precious natural, cultural, and historical resources. With over 80,000 employees and offices throughout the U.S., DOI manages 500 million acres of U.S. lands.

Areas of Expertise: With donor funds, DOI's International Technical Assistance Program (DOI-ITAP) provides training and technical assistance to countries in subject areas of DOI staff expertise, such as:

Protected area management	Visitor Services
Cultural resources management	Recreation management
Environmental education	Ecotourism
Endangered species conservation	Wildlife law enforcement
Minerals management	Resource interpretation
Reclamation of abandoned mine lands	Park infrastructure
Fire management	Concessions management
Control of invasive species	Community outreach

DOI Bureaus: DOI-ITAP draws its project staff from nine DOI bureaus.

National Park Service (NPS): Manages more than 384 sites, including prime natural parks, historic and cultural areas, monuments, battlefields, seashores and lakeshores, and recreation areas. This bureau accommodates and educates more than 275 million visitors per year.

U.S. Fish and Wildlife Service (FWS): Responsible for the protection and conservation of fish, wildlife, and plants (including U.S. endangered species) and regulates the international trade of plants and animals. FWS manages more than 700 field units, including national wildlife refuges; national fish hatcheries; and law enforcement/ecological services field stations.

Bureau of Land Management (BLM): Manages more than 270 million acres of public lands for such diverse uses as energy, minerals, and timber extraction; livestock forage; fish and wildlife habitat; and scenic and recreational uses.

Office of Surface Mining, Reclamation and Enforcement (OSM): Restores mines abandoned before 1977 and is responsible for protecting people and the environment during coal mining and restoration.

U.S. Geological Survey (USGS): Responsible for scientific research and applications related to earth processes; natural disasters; and water, biological, energy, and mineral resources.

Bureau of Indian Affairs (BIA) and Bureau of Indian Education (BIE): Serve American Indians, Indian tribes, and Alaska Natives by providing social services, promoting economic opportunity, and protecting and improving trust assets.

Bureau of Reclamation (BOR): Manages 58 hydroelectric power plants and is the largest wholesale supplier of water in the United States.

Minerals Management Service (MMS): Manages mineral resources on the outer continental shelf of the U.S. in a safe and environmentally sound manner. MMS provides fiscal accounting and management of both onshore and offshore mineral resources.

DOI-ITAP's Unique Strengths:

- DOI-ITAP subject matter experts have a depth of applied technical knowledge, international experience, and relevant language skills.
- DOI-ITAP fosters direct, sustained exchanges between U.S. natural resource managers and their host-country counterparts. These are often direct government-to-government partnerships through which DOI-ITAP provides a level of insight and assistance that only governmental agencies are equipped to offer (e.g., the issuance of regulations, law enforcement, and jurisdiction considerations).
- DOI-ITAP offers technical assistance on a reimbursable basis. The salaries and benefits for all DOI-ITAP subject matter experts providing short-term technical assistance are covered by the U.S. Department of the Interior. Donor funds cover travel costs and the per diem of the DOI subject matter technical experts, support for field activities, equipment, program management, coordination, and support. DOI-ITAP matches donor contributions by an average ratio of 2:1.
- With its large internal training staff, DOI-ITAP can “train the trainers” to ensure long-term program sustainability.

Section II: Active Programs

The following are descriptions of the progress achieved in the Department of the Interior's current technical assistance initiatives. New material in the body of the sections below is in ***bold italics***.

Central America & the Caribbean

Central America/Dominican Republic • CITES Capacity Building

SUMMARY OF ASSISTANCE

With funding from the U.S. Department of State, DOI-ITAP is working under the Central America-Dominican Republic Free Trade Agreement (CAFTA-DR) to strengthen policies and procedures that govern their implementation and enforcement of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). In addition, the purpose of this program is to reduce the negative environmental effects of mining activities in Guatemala. Among other objectives, and in accordance with the Inter-Agency Agreement (IAA) between the Department of State (DOS) and DOI, this work aims to:

- Strengthened legal framework to improve CITES implementation in selected countries;
- Improved performance of CITES management, scientific, and enforcement authorities in selected countries, including improved coordination among these authorities within selected countries;
- Strengthened protection of CITES species in their habitats;
- Coordinated CAFTA-DR CITES capacity-building efforts within the region; and
- Improved environmental regulations for mining in Guatemala based on best practices

These activities will take place through close consultations with the U.S. Fish and Wildlife Service, a DOI agency, which houses the U.S. CITES Management and Scientific Authorities.

DOI-ITAP has been tasked to coordinate multiple key governmental and non-governmental CAFTA-DR CITES implementers to effectively and efficiently implement this effort. These include:

- U.S. Agency for International Development (USAID Regional & Bilateral missions)
- TRAFFIC
- Humane Society International (HSI)
- Central American Commission for Development and the Environment (CCAD)
- U.S. Forest Service
- Others as identified

FUNDING

U.S. Department of State in FY 2007 (Funds received June 2008)

RESULTS TO DATE

DOI CITES Program Coordination

DOI has been tasked with the role of overall coordinator for the CAFTA CITES Program, which includes the two primary implementing partners, HSI and TRAFFIC, two international NGOs, to maximize efficiencies and communications. DOI has also actively engaged its CAFTA CITES counterparts in the region, as well as the international organizations, CCAD and the CITES Secretariat, as detailed below.

Bi-national and Regional Activities

- ***Regional CITES Meeting to Prepare for the COP:*** DOI and CCAD have organized a regional meeting to be held January 25-26 in San Jose, Costa Rica. The purpose of the meeting is to address issues of regional interest, proposals for listing new species on CITES Appendices, and DOI support for efforts to raise awareness about program accomplishments, in preparation for the upcoming Conference of the Parties (December 2009).
- ***Costa Rica-Nicaragua Capacity-Building Workshop:*** In coordination with the CITES Administrative Authorities of Costa Rica and Nicaragua, DOI organized a capacity-building workshop in San Juan del Sur, Nicaragua, for customs officials, agricultural quarantine officials, and environment ministry technicians from the border region. The workshop utilized the interactive CD curriculum developed by the CITES Secretariat as a tool to integrate the procedures and regulations established by the CITES Authorities in each country. Forty officials from both countries were in attendance. See Annexes II and III for News Article from Nicaragua and Costa Rican media, respectively (November 2009).
- **Updating Bi-national CITES Operations Manual (Costa Rica, Nicaragua):** DOI was requested to update this BiNational Manual, originally drafted by CCAD in 2005, that addresses legal and operational aspects of complying with CITES.
 - ***Manual Completed and Printed:*** FWS CITES reviewed and approved the manual. One thousand copies were printed and sent to CITES Authorities in Costa Rica and Nicaragua for distribution. The manual will be used as a capacity-building tool at the national level in both countries (see Annex 1 for cover shot and Table of Contents) (November 2009).
 - **Manual Update Completed:** The two country CITES Authorities reviewed the revised manual for accuracy, the CITES Secretariat reviewed it for technical content, and CCAD reviewed it for layout and design standards. Once approved by the FWS CITES Authorities, this document will be ready for printing and dissemination (September 2009).
 - DOI held several coordination meetings and conference calls to complete a draft in coordination with the GON and GOCR (May/June 2009).
 - DOI submitted the revised draft to the Costa Rican and Nicaraguan officials for review (June 2009).
- **Bi-national CITES Listing Proposal:** Moving Forward to the COP: Because of the political situation in Honduras, the proposal will be presented by Guatemala. The

proposal has been translated for official submission to the CITES Secretariat (September 2009).

- **Poster and Brochure:** *DOI is facilitating the development of Listing Proposals brochures (in English, Spanish, and French) and Conservation Promotion Posters about the Ctenosaura genus proposals for distribution at the Conference of the Parties to be held in Qatar in March 2009 (See Annex V) (November 2009).*
- **Listing Proposals Finalized:** *Due to the political situation in Honduras, these proposals were submitted separately to the CITES Secretariat (see Annex IV). Pending resolution in Honduras, the countries may together to support each other's Proposal at the COP (November 2009).*
 - *The Guatemala CITES Authorities have officially submitted the Ctenosaura palearis listing proposal to the CITES Secretariat. The proposal is on the CITES Secretariat's website at <http://www.cites.org/esp/cop/15/prop/S-15%20Prop-12.pdf> (Spanish), <http://www.cites.org/eng/cop/15/prop/E-15-Prop-12.pdf> (English)*
 - *The Honduran CITES Authorities have officially submitted the Ctenosaura bakeri, C. melanosterna, and C. oedirhina to the CITES Secretariat. The proposal is on the CITES Secretariat's website at <http://www.cites.org/esp/cop/15/prop/S-15%20Prop-11.pdf> (Spanish), <http://www.cites.org/eng/cop/15/prop/E-15-Prop-11.pdf> (English)*
- **Listing Proposal Update to the Region:** A summary of the proposal was presented at a Regional CITES Authorities meeting, sponsored by DOI, Guatemala City. Following the presentation, the CAFTA-DR CITES authorities have committed to support the proposal at the next Conference of the Parties (August 2009)
- Two meetings were held in April and June to discuss the details of the proposal with the Guatemalan CITES Authorities (April/June 2009).
- DOI and its partners held a training workshop with participation of 16 people representing 12 Guatemalan governmental, academic, and NGO institutions (May 2009).
- A full final proposal of 25 pages has been compiled and validated by the GOH (June 2009).
- The GOG and GOH have agreed to propose the listing of these species. Final language of the proposal currently is being drafted (June 2009).
- DOI-ITAP, in partnership with the NGOs Zootropic (Guatemala) and Bay Island Foundation (Honduras) officially presented to the respective Guatemalan and Honduras CITES authorities a Listing Proposal for these four iguana species of the genus Ctenosaura to be included in the CITES appendix (to be determined which). The two governments accepted this initiative and agreed to a process and timeline. These endemic iguana species have a limited range and are threatened by uncontrolled commerce. Through this effort, the partnership will sensitize and build capacity within the two governments on how to analyze population data and develop CITES listing proposals (March 2009).
- **CITES Training Program Development:** The development of the interactive electronic CITES curriculum was completed. The course contains information on the

administrative, legal and technical resources for implementation of CITES, species identification guides, and a virtual library of CITES publications of CITES dating back to ratification of the Convention. A series of exercises to enhance learning, developed by the CAFTA-DR countries, have been incorporated into the CD as well as other associated materials (e.g., manuals, species identification CD) (August 2009).

- Curriculum Delivered: Curriculum was presented to 30 CITES Authority officials from throughout CAFTA-DR region at workshop in Guatemala (see Annex 1 for example Press Releases) (August 2009).
- The CITES Secretariat Capacity Building Unit, in partnership with DOI, has finalized the content that will be included in the CITES Training Program for CAFTA-DR countries, which the CITES Authorities approved (March 2009).
- Regional Trade Analysis: Coordination with CITES Authorities on the Iguana Trade Analysis:
 - *Nicaragua Site Visit: IIF partners met with CITES authorities, managing authorities of MARENA, NGOs, and academic professionals from UCC and UCA to gather a variety of information on the 3 iguana species (C. quinquecarinata, C. similis, and I. iguana) within Nicaragua. This included: unpublished and published scientific literature; locality data; historical, current, and planned farming activities; international trade; conservation efforts; and levels of local exploitation. Additionally, the IIF partners, with the participation of individuals from MARENA, UCC, and local NGOs, visited 6 farms (of various sizes and objectives) breeding Iguana iguana and 1 farm breeding C. quinquecarinata. Lastly, the IIF partners and local participants interviewed individuals actively selling C. similis and I. iguana for consumption and/or the internal Nicaraguan pet trade in public markets, pet shops, and along the highway (December 2009).*
 - *El Salvador Site Visit: IIF partners met with CITES authorities, managing authorities of MARN, and USAID to gather information on historical, current, and future Iguana iguana farming activities. IIF partners, along with MARN participants, visited 2 large scale farming operations, breeding I. iguana for the pet trade. Additionally IIF partners, along with participants from MARN, interviewed individuals at public markets and along the highway who were actively selling C. similis and I. iguana for consumption and/or the internal El Salvadoran pet trade (December 2009).*
 - *Iguana Trade Data Analysis: IIF partners obtained information on iguana trade from the FWS LEMIS system, including analysis on the species commonly traded in the US, trade tendencies in those species since 2000, the amount of exports from each project country, the origin of traded specimens (wild or captive bred), and the purpose of the transactions (commercial, scientific, etc), among other issues. Information on use of the internet for trade of relevant species was gathered for analysis. Additionally, information has been obtained from key government staff responsible for the management and supervision of iguana captive breeding and exporting in Guatemala, El Salvador and Nicaragua, including data on names of companies and volume exported. Costa Rica's government provided only basic information related to*

iguanas, and stated that there is no export of iguanas from that country and that captive breeding has decreased over the years. Contact with Honduran authorities is not yet possible due to the political situation (October-December 2009).

- TRAFFIC, in conjunction with DOI, presented an update on this study to the CITES Authorities as well as the CITES Secretariat. Recommendations were issued by the audience and coordination plans were established to facilitate the experts visits to the region as they conduct this study (August 2009).
- IIF partners conducted their first visit to Guatemala, met with and presented details about the project to CITES Authorities, applied for the appropriate country research permits, and conducted initial field research (June 2009).
- DOI officially partnered with these entities through a signed MOU with IIF (May 2009).
- DOI, in partnership with the Utah Valley University, Texas A&M University, and the non-governmental organization, TRAFFIC, through the International Iguana Foundation, officially presented to the CAFTA-DR CITES authorities a regional trade analysis project for several iguana species of the genus *Ctenosaura* and the Iguana iguana, which the governments accepted. Through this effort, valuable data on trade patterns for these species will be collected as well as capacity will be built within the CAFTA-DR CITES authorities on how to conduct trade analysis (March 2009).

COUNTRY ACTIVITIES

The following section presents DOI CAFTA activities completed by country and under the specific DOI-State Dept IAA objective.

Costa Rica

- **CITES Training Preparation:** The Costa Rican CITES authorities, under the Conservation Areas Branch (SINAC), need to be better equipped to hold a series of CITES training events around the country, using the materials being prepared by the CITES Secretariat, as well as to institutionalize this training programs for the long term. DOI is providing minimum computer and audiovisual equipment to the central CITES offices and key regions of the country.

Equipment Provision: DOI transferred computer and audiovisual to Costa Rican CITES authorities to strengthen the management of the CITES office and regional SINAC units (see Annex 2 for Press Release and Equipment List (September 2009).

Outreach campaign for the protection of wildlife in Costa Rica: DOI is providing resources and technical expertise to design outreach materials and information on "protection and conservation of endangered species" to CITES authorities of Costa Rica. Banners, flyers, posters and other materials are being developed for display at major airports, ports and border crossings. The materials include content on preventing the

illegal purchase and export of animals and plants. The official launch of the outreach campaign will be held in November (August-September 2009).

DOI has provided assistance and advice to the Costa Rica Management Authority in determining appropriate audiovisual and computer equipment for CITES training events. DOI is currently in the acquisition process (April 2009).

- Improve Performance of Management and Scientific Authorities: Bi-national Wildlife Law Enforcement Workshop (sponsored by TRAFFIC): DOI-ITAP participated in a bi-national (Costa Rica, Panama) CITES workshop held outside of San José, Costa Rica. At this workshop, which was attended by regional CITES authorities and law enforcement officials, DOI-ITAP contributed to the development of a strategy for regional cooperation. DOI-ITAP also sponsored the participation of CITES Secretariat capacity-building expert, Marcos Silva, and DOI field coordinators to develop a plan for long-term CITES training in the region. DOI also initiated discussions toward assisting Costa Rica to obtain key equipment for CITES implementation. (October 2008).

DOI met with a representative of the Management Authority of Costa Rica to follow up on the process of identifying equipment needs and other publishing and public information activities supported by DOI (June 2009).

Dominican Republic

- Diagnosis of existing legal framework for CITES: DOI met with SEMARENA representatives to discuss the legal framework study and it was decided that this study would be postponed for 2010 (July 2009).
 - With the Government of the Dominican Republic (GODR), DOI identified the need to analyze wildlife legal regulations in force in the Dominican Republic for the purpose of updating the CITES regulations (May 2009).
- Improved Management and Protection of Hispaniola Parrot Habitat: A team of four FWS staff, specialized in parrot recovery in Puerto Rico, successfully led training workshops at three locations within the DR (the National Zoological Park, East National Park, and Jaragua National Park) on the (1) construction and use of Viewing Platforms for biological monitoring and law enforcement, and (2) construction and use of parrot nesting boxes (August 2009).
 - DOI is developing a plan of work with the GODR, the National Zoological Park, and the local NGO Grupo Jaragua to strengthen the protection of the Hispaniola Parrot in several of its breeding areas. This effort includes monitoring, installation of nesting boxes, and improved law enforcement during the breeding season (ongoing).
 - DOI has maintained contact with the DR National Zoological Park and other counterparts as a four-person FWS parrot recovery expert team from the Puerto Rico FWS office prepares acquisition of necessary materials to lead a series of August workshops (June 2009).

- A team of four FWS staff, specialized in parrot recovery in Puerto Rico, has purchased biological monitoring equipment, nesting boxes, and the materials to construct viewing platforms. This was in preparation for a series of training workshops they will lead in the DR in August 2009 (May 2009).
- ***Communication and Outreach: DOI began the process of supporting the Dominican Republic CITES Authorities to place billboards along highways with messages about the protection and regulation of the Hawksbill turtle. The billboards are intended to raise awareness about the purchase of products made from Hawksbill shells (November 2009).***
- **Biological Monitoring Training Course: Workshops Completed:**
 - ***DOI, in coordination with the SEMARENA CITES Authorities, held a workshop on December 4, 2009, for 38 agricultural inspectors, CITES officials, and SEMARENA regional directors. The training covered operational and legal aspects of CITES using the interactive CD curriculum developed by the CITES Secretariat (December 2009).***
 - A team of four FWS staff successfully led training workshops at three locations within the DR (the National Zoological Park, East National Park, and Jaragua National Park) on the (1) construction and use of Viewing Platforms for biological monitoring and law enforcement, and (2) construction and use of parrot nesting boxes (August 2009).
 - A DOI biological monitoring expert led a training course on biological monitoring using radio telemetry to 12 participants representing the Government of the DR, university students, and the National Zoological Park. DOI and the DR CITES authorities have agreed to additional training in the future as part of developing a national biological monitoring system. The training course expenses were covered by the National Zoological Park (February 2009).
- **Telemetry, Viewing Platforms, and Nesting Boxes Training:** A four-person DOI-FWS parrot recovery expert team from the Puerto Rico FWS office purchased biological monitoring equipment, nesting boxes, and the materials to construct viewing platforms, to lead a series of August workshops on various aspects of biological monitoring and law enforcement in 3 selected sites in the DR (June 2009).
- **Flagship Species/Model Park Management:** DOI-ITAP is working with agency (NOAA, FWS, U.S. Department of State) and NGO (TRAFFIC and HIS) experts in the United States, to assist the government of the Dominican Republic reduce poaching and illegal sales of sea turtle products. DOI-ITAP has convened a number of meetings of these experts and provided technical guidance during a trip by DOI-ITAP and FWS staff (August 2008). A major breakthrough took place when the government of the Dominican Republic, following the DOI visit and subsequent discussions with DOI staff, announced that it would halt all sales of illegal turtle products. During the discussions with DOI staff, Dominican officials expressed their long-held concerns regarding the widespread illegal trade in turtle products, and shared with DOI their detailed plans for addressing the problem. Keenly aware of the CAFTA-CITES implications of the continued illegal trade,

the officials had been working for some time on a comprehensive strategy to combat the problem. As of November 2008, we understand that the public stalls that used to sell sea turtle products to tourists no longer have such products on display (November 2008).

El Salvador

- Marine Turtle Action Plan: In 2000, the Government of El Salvador developed a Strategy for the protection and conservation of marine turtles.
 - *DOI submitted a draft of the Action Plan to MARN and MAG for review. The Action Plan was generated through a participatory process that included stakeholders in all three regions of the country and in collaboration with USAID's regional office (December 2009).*
 - Turtle Nests Rescued and Hatchlings Released: In this past quarter, a total of 58 Hawksbill turtle nests were rescued and over 7,000 Hawksbill turtle hatchlings were released in eastern El Salvador (July-September 2009).
 - Investigation Into Causes of Low Birth Rates: Inspected eggs for embryonic development and identified two causes: (1) egg manipulation by “tortugeros” (turtle egg thieves) of eggs accidentally left behind, and (2) extra high temperatures with no rain experienced in the months of July and August (August - September 2009).
 - DOI-ITAP NGO partner, Funzel, has begun the project by establishing nesting sites, buying eggs, and incorporating their work into the Turtle Action Plan (June 2009).
 - The Government of El Salvador signed a Ministerial Order banning the sales and consumption of marine turtles, eggs, and products in March 2009. As a follow up to the ban, DOI agreed to assist MARN draft the Turtle Plan Action.
- National Wildlife Policy: DOI helped to review a draft National Wildlife Policy, generated by MARN, which outlines strategies and guidelines for wildlife management, including international trade (January 2009).
- Improving CITES Implementing Legislation: DOI-ITAP has partnered with a local legal expert in El Salvador to work with the Ministry of Agriculture (MAG) and Ministry of Environment (MARN) to help facilitate bringing El Salvador's laws and regulations into compliance with CITES. DOI-ITAP has also engaged the CITES Secretariat to assist El Salvador in this process. Accomplishments to date include:
 - *CITES Study Tour to Mexico: Eight members of El Salvador's Administrative, Scientific, and Enforcement Authorities met with their counterparts in the Mexican CITES Authorities to share best practices and improve coordination. Follow-up activity included an action plan for cooperation between Salvadoran CITES authorities and creating CDs and other materials of the information gathered on the trip (November 2009).*
 - CITES Category 1 Requirements Completed: Through the multiple efforts completed by the previous and current GOES, with assistance from USG, CCAD, and the CITES Secretariat, the Salvadoran CITES Authorities have

complied with all requirements to be upgraded from the current CITES Category 2 status (meeting some but not all CITES requirements) to CITES Category 1 status (meeting all CITES requirements). These efforts are supported by the region, who will submit a formal proposal for the upgrade in status at the upcoming CITES Conference of the Parties, scheduled for March 2010 (August 2009).

- Planning Assistance: DOI provided technical and legal advice to the CITES authorities on program development and have agreed to collaborate to improve CITES implementation in El Salvador, including:
 - Jointly defined coordination mechanisms, training, and technical guidelines for the preparation of species identification material,
 - Defined a plan of action for protection of sea turtles, among other species (July- September 2009).
- DOI coordinated 12 meetings with officials from MARN and the MAG for the purpose of planning the following activities:
 - Training programs in the municipalities of El Salvador
 - Process of updating the CITES operational manual
 - Collaborate on a legislative plan progress report, which must be submitted by the Government of El Salvador in order to upgrade from CITES compliance Category II to Category I.
 - Coordinate the participation of representatives from CITES enforcement authorities in the legal and operational training workshops in August in Guatemala.
- CITES scientific authority identified: The GOES officially published, through its own official register(Diario Oficial No. 72 del tomo No. 383, 22 April 2009), the naming of MARN as the CITES Scientific Authority (April 2009).
- The GOES officially notified the CITES Secretariat and it is posted on the CITES website (May 2009).
- CITES management authority identified: The GOES officially published, through its own official register(Diario Oficial No. 72 del tomo No. 383, 22 April 2009), the naming of MAG as the CITES Management Authority (April 2009).
- The GOES officially notified the CITES Secretariat and it is posted on the CITES website (May 2009).
- CITES enforcement authority identified: The GOES officially published the naming of the CITES Enforcement Authority within the CITES Implementation Regulations (see below)(May 2009).
- The Government of El Salvador has identified the Attorney General Office, National Civil Police, and Customs as the CITES enforcement authority (January 2009).
- CITES Implementing Regulations Drafted: El Salvador published the "Special Regulations for International Trade in Endangered Species of Wild Fauna and Flora" in the official register on May 18, 2009, in accordance with CITES rules (Diario Oficial Tomo 383, <http://imprentanacional.gob.sv>). The regulations entered into force eight days later.

- DOI followed through with the process of finalizing and getting the CITES implementing regulations signed by the President. Signature is still pending (March 2009).
 - Development of comprehensive CITES implementing regulations, through a highly participative process, facilitated by DOI, between the Ministries of Agriculture and Environment (final draft completed November 2008).
 - At the request of El Salvador authorities, DOI organized a two-day workshop on CITES implementation, to prepare officials to effectively implement new CITES regulations. DOI supported the key participation of a capacity-building expert from the CITES Secretariat in this workshop.
 - Preparation of an initial analysis of the legal sanctions available in El Salvador for trade in violation of CITES. Adequate domestic sanctions to deter such illegal trade is another requirement of the Convention (October 2008).
 - An official letter from DOI to the Public Prosecutor's office (Fiscalía) recommending that they work with MARN and MAG to determine how best to take on the obligations of the CITES Enforcement Authority. The creation of an enforcement authority is one of the requirements of the CITES Secretariat's Legislative Project to ensure that all countries have adequate domestic measures to implement the Convention (December 2008).
 - Development of a CITES Legislative plan by the Government of El Salvador, setting out a timeline for the country to fulfill its requirements for developing legislation that conforms to the Convention. Under this plan, El Salvador commits to completing its obligations by February 2009 (July 2008).
 - The MAG and MARN sent a letter to the CITES Secretariat officially transferring responsibility for El Salvador's Scientific Authority (SA) to MARN, which has greater scientific expertise to carry out the wildlife evaluations required of the SA (June 2008).
 - The CITES Secretariat, with support from DOI-ITAP, visited El Salvador to provide advice on the country's wildlife legislation, and to jump-start the process to develop comprehensive CITES regulations (June 2008).
- Strengthening Law Enforcement: Lacey Act Presentation at CCAD Regional Meeting: At CCAD's request, DOI-ITAP provided an overview of the Lacey Act to the CAFTA-DR CITES officials during a CCAD Regional CITES meeting to highlight the need for comprehensive domestic laws that are effectively enforced (September 2007).
 - Flagship Species/Model Park Management: DOI-ITAP is supporting FUNZEL, a key local NGO partner, to develop a comprehensive monitoring and turtle protection program for the Hawksbill sea turtle.
 - ***Release of Hawksbill Newborns: With DOI support, 10,160 hatchlings from 76 different nests were released between October and early December from the hawksbill turtle egg incubation facility on Isla San Sebastian. In El Icacó 5,051 turtles hatched from a total of 74 nests, and in the Maculis nursery 1,700 turtles were released from 16 nests. In total, through this project 15,325 individuals have been released (October 2009).***

- ***Training Local Turtle Habitat Managers:*** Six capacity building workshops were held in the three protected areas – Maculis, San Sebastian, and Il Icaco – for the purpose of educating marine turtle egg handlers about CITES and the habitat protection program. About 86 park guards, students, and other egg handlers were trained (October 2009).
- ***National Outreach Campaign:*** Began a national outreach campaign to minimize sea turtle egg extraction and consumption, and decrease the traffic of hawksbill-derived products in El Salvador. Designed and printed 1,500 stickers. A brochure entitled “Towards the Conservation of Coastal Resources in El Salvador: Hawksbill Turtles – A Warning Sign” has been designed and priced with print media outlets, and will be released in January 2010 (December 2009).
- **In-Country CITES Trainings:**
 - ***Five (5) CITES capacity-building workshops focusing on CITES legal responsibilities, with the participation of 23 Municipal Environmental Unit staff, National Civil Police, MAG and MARN technicians, and other stakeholders (December 2009).***
 - **Legal Capacity-Building Workshops:** DOI and the GOES led a number of capacity-building workshops across the country, reaching key departments and municipalities, on the new CITES and related wildlife legal requirements. These include:
 - Three (3) separate CITES capacity building workshops to train a total of 75 people, including participants from the environmental units of Salvadoran municipalities (July 2009).
 - Two (2) workshops to train a total of 50 on current wildlife law and regulations (August 2009)
 - Two (2) CITES capacity-building workshops with the participation of 48 MAG and MARN CITES authorities scientists and technicians, including new managers appointed by the newly elected President (August 2009).
 - With DOI funds and technical assistance, the GOES has proposed to conduct a 1-day legal/technical CITES orientation course to key representatives of the police force, customs, forestry technicians, and municipal environmental units, taking the course to each of El Salvador’s 14 Departments.
 - A course was conducted each in 3 Departments to a total of 90 GOES representatives (May-June 2009).

Honduras

- **Improved Management of Honduras’ Protected Areas Nationwide:** At the request of the Government of Honduras (GOH), DOI and the GOH have initiated the development of “Public Use Guidelines” for Honduras’ protected areas, as a measure to minimize human impact to better protect these habitats, the majority of which contain CITES species (March 2009).
 - With the GOH, developed the terms of reference for project (June 2009).

- Improved Protection of Honduras' Protected Areas Nationwide: At the request of GOH, DOI is advising the GOH on the development of the "National Strategy for Control of the Extraction and Illegal Transport of Forest Products and Wildlife," as a measure to better protect and sustainably manage trade in mahogany and other CITES species that inhabit these forests. In 2007, two DOI law enforcement specialists completed a "Law Enforcement Analysis of the Protected Areas of Honduras," outlining strengths, weaknesses and recommendations. Included among these recommendations were the needs for improved forest management, and timber and trade controls (March 2009).
 - The same DOI law enforcement special agents reviewed this draft strategy and provided technical recommendations for improvement (April 2009).
- Design of monitoring system for Psittacidae species (parrots and parakeets): DOI has partnered with Honduran and Nicaraguan experts to design a monitoring system for these species in the Honduran Mosquitia Protected Area. The Nicaraguan expert will contribute to this effort the experience and lessons learned from the three population studies of the same species that he completed as well as the methodology he developed for their monitoring (March 2009).
 - Contacted local Psittacidae monitoring experts and with the GOH developed terms of reference for this task. Identified minimum technical requirements for monitoring system design (June 2009).
 - DOI is supporting Honduran authorities in the procurement of biological monitoring equipment to study endangered species, including Psittacidae, in their habitat (June 2009).
- Technical Assistance to Update CITES Law: DOI has initiated the process of updating Honduras' CITES Ministerial Order (signed 2004) so that it conforms with the CITES legislative requirements, using a model recommended by the CITES Secretariat, and with the new Honduran Law on Forestry, Protected Areas, and Wildlife, passed in February 2008. An interagency commission was formed that will lead and follow through with this effort (March 2009).
 - TORs Agreed Upon: The terms of reference have been developed and approved by the Honduran CITES Authorities for a local expert, who will work with the DOI In-Country Legal Coordinator, to update the Ministerial Order (Quarter 3 2009).
 - DOI arranged and conducted a meeting with Honduran authorities to move the process forward. DOI met with the Inter-institutional Commission (composed of officials from ICF, SAG and SERNA), gained the GOH's commitment to a schedule of activities necessary for updating the order, reviewed terms of reference, and agreed that CCAD would hire a short-term consultant with expertise in Honduran law to assist with the legal drafting effort (April 2009).
- Tri-national Wildlife Law Enforcement Workshop (sponsored by TRAFFIC): DOI-ITAP participated in a tri-national (Honduras, El Salvador, Nicaragua) CITES workshop held in Tegucigalpa, Honduras. At this workshop, which was attended by regional CITES authorities and law enforcement officials, DOI-ITAP contributed to the development of a strategy for regional cooperation. DOI-ITAP invited and sponsored the participation of

Juan Carlos Vasquez, legal specialist at the CITES Secretariat and one of the workshop's keynote presenters (June 2008).

Guatemala

- Strengthened Legal Framework:
 - CITES Outreach Event: The Guatemalan CITES Authorities invited DOI to a CITES outreach event in the Petén to give a presentation on the legal responsibilities of Chapter 17 of NAFTA and CAFTA-DR association with the CITES Convention (August 2009).
- Strengthened and Institutionalized Public Participation:
 - ***Cross-Sector Roundtable Meeting: The fourteenth meeting of the roundtable resulted in Declaration No. 3, calling on the Government authorities to allocate resources to SIPECIF for the fire season in 2010 (October 2009).***
 - ***Successful Political Leveraging: On November 13th the Council for Development of Peten (CODEDE) passed three resolutions focused on 1) Promoting high-level support for financing the SIPECIF, based on an investment plan which was prepared with assistance from WCS and Balam; 2) Ensuring that financial resources of the Petroleum Fund Act are invested in protected areas of Petén; and 3) transferring the technical and political decisions of the PDP-RBM to local actors in Petén (November 2009).***
 - ***Public Presentation: A Public presentation was made to the President of Guatemala on the program "Gobernando con la Gente" (Governing with the People" detailing five approaches to strengthen governance and investment for the protection of the Maya Biosphere Reserve (December 2009).***
 - Political Influence Effort Succeeded: As a result of the Declaration submitted by the Roundtable in July, President Colom assigned Vice-President Espada as the new lead for “Cuatro Balam.” In September, VP Espada traveled to the Peten to personally award the community tourist guide certificates and reaffirm to all the stakeholders that the central GOG has re-dedicated itself to “Cuatro Balam” and will show its tangible support through a series of upcoming activities (July, September 2009).
 - July 2009 Cross-Sector Roundtable Meeting: The main topic addressed was the critical need to re-establish governance in the MBR, as part of President Colom's high priority initiative to sustainably develop the MBR and its nearby urban centers (“Cuatro Balam”). An outcome of the meeting was a Declaration signed by the Roundtable participants requesting that President Colom re-dedicate himself to the support of “Cuatro Balam (July 2009).
 - Develop Impact Mitigation Manual: WCS developed a statement of work for a visitor impact monitoring plan called the “Impact Mitigation Manual”. The point of departure for this manual will be the existing plan incorporated within the Draft Public Use Plan being drafted by a multi-sector team lead by the GOG for the

eastern half of the MBR. DOI expects to have a first draft of this manual in 6-8 months (June 2009).

- Motivation of Community Conservation: Conservation Incentive Payment Effort: In support of long-term conservation objectives, WCS is working to raise financial resources to provide an annual “conservation incentive payment” to the village of Carmelita modeled on a on-going project approved by CONAP in Uaxactún. To date, pledges of \$25,000 annually have been obtained, with \$10,000 from Conservation International’s Conservation Stewards Program (CSP), and \$15,000 from the Panthera Foundation (i.e. \$10K annually for the village, and \$5K annually for long-term jaguar monitoring in the area) (September 2009).
 - Community-requested Jaguar Reserve: Members of the community of Carmelita have expressed interest in obtaining formal support for the declaration of their forest concession as a Community Jaguar Reserve. Although the classification of their management unit is bound by the laws governing the MBR, it may be possible to re-name the concession as the Carmelita Jaguar Reserve and Forest Concession (August 2009).
 - As a result of the jaguar population studies presentation to the Carmelita community, a village member offered to collaborate in the conservation of an active scarlet macaw nest within the Carmelita Forestry Concession (another CITES species). In late June, as a result of the outreach event and subsequent follow-up, the “new” nest successfully fledged one macaw chick. A follow-up event is planned with the village in July (April 2009).
 - DOI continues to participate in and provide technical assistance to the Multi-Sector Roundtable, a consensus-building, information-sharing, and conflict-resolution forum geared toward promoting model management of the eastern MBR. The main focus of the March Roundtable meeting was to coordinate GOG and NGO resources and capabilities to most effectively and efficiently prepare for and control wildfires in the Eastern MBR (March 2009).
- DOI Support of Local NGOs
 - *Regional Environmental Commission of Petén (COREMA)*
 - *Balam as Member: Asociación Balam is part of the COREMA, providing technical and financial support for its strengthening. This committee is key to promoting political decisions that help improve the conservation of the MBR (November 2009).*
 - *First CCRBM Meeting: On October 23rd the first meeting of the Coordinating Committee of the MBR was held, with the technical and financial assistance of Asociación Balam. Balam represents the NGO sector within the CCRBM (October 2009).*
 - DOI continues to support Balam on selected activities while Balam continues to represent DOI at the Multi-Sector Roundtable meetings and other workshops, etc., as approved by DOI. Through this partial support, Balam has positioned itself well as a leading expert and reliable manager and contributor to numerous sustainable development efforts in the MBR (ongoing).

- Investigating Opportunities for large-scale Law Enforcement Initiatives in the Maya Biosphere Reserve (MBR):
 - MBR Threats Presentation to State Department and USAID in Washington, DC: With DOI input, WCS led a presentation to a multi-bureau State Department and USAID meeting on the latest threats to the MBR, including the use of ungoverned “protected areas” as bases of operations for organized transnational crime, including narcotics and other trafficking. The presentation highlighted the link between these illegal activities and U.S. national security (September 2009).
 - Follow-up Meeting with US Embassy: DOI, Colombian Parks, Petén Department GOG and NGO partners met for the latest update on the security situation in the MBR, and from this, developed a Conceptual Plan for how Mérida Initiative funds might be used in the MBR. DOI met with the Minister of the Environment and Natural Resources, who convened a number of other high-level multi-agency Guatemala City GOG officials to obtain buy-in for the Conceptual Plan. Subsequently, this draft was presented to US Embassy and USAID officials, who noted their support and provided DOI with contact information for Merida and other funding source decision-makers in Washington DC. DOI will follow up accordingly in DC (June 2009).
 - DOI and Colombian park representatives held meetings in Guatemala City with the US Ambassador, USAID Mission Director, other security and development embassy and USAID staff to present their joint analysis of the current law enforcement situation in the MBR as well as recommendations for improvements. In response to DOI’s request, the Ambassador agreed to consider the possibility of accessing USG Plan Mérida (anti-drug trafficking) funds for the protection of the MBR, particularly the western half, from the large-scale damage being caused by the drug-traffickers. Currently, no Plan Mérida funds are being spent in the MBR. Next steps are for DOI, Colombian Parks, and NGO partners to develop a Conceptual Plan for how Plan Mérida funds can be used in the MBR with GOG buy-in, and present to the Ambassador and USAID Mission Director (March 2009).
- Identification Fact Sheets for Tillandsia species (bromeliads): **Final Draft Submitted:** *Local expert has finished compiling information and has presented a draft Identification Fact Sheet to the Guatemalan CITES Authorities. CITES Authorities are currently reviewing the document, and with DOI support, plan to print the guide and begin using it as a capacity-building tool with inspectors in January 2010 (December 2009).*
 - Work Initiated: A local expert has begun drafting the identification guide for species of genus Tillandsia in Guatemala (August 2009).
 - With the GOG, developed the terms of reference for the development of Tillandsia (bromeliads) Fact Sheets (June 2009).
 - Guatemala’s CITES management authority, under the Department of Wildlife, within the National Council of Protected Areas (CONAP), has initiated work with DOI-ITAP to develop “Identification Fact Sheets” for species of the Tillandsia genus. These fact sheets will contain technical, legal, and photographic information regarding these species that will allow CONAP staff and customs

officials in all regions of the country to better protect these species through improved inspections (March 2009).

- Identification Fact Sheets for freshwater fish: ***Final Draft Submitted: Local expert has finished compiling information and submitted a final draft of the Guatemalan CITES Authorities for their approval (November-December 2009).***
 - Work Initiated: A local expert has begun drafting the identification guide for select fish species in Guatemala (August 2009).
 - With the GOG, developed the terms of reference for development of Freshwater Fact Sheets (May 2009)
 - CONAP has initiated the monitoring of the Polochic Watershed, which discharges into the Guatemalan Caribbean, to collect data and identify native and exotic species within this system. DOI is assisting, in partnership with local researchers, to help collect data for the development of a data base and of identification fact sheets for the select species.
- Monitoring of Cetaceous (whale) species: Two Monitoring Trips Completed: With DOI support and in coordination with researchers at the University of San Carlos, CONAP officials made two voyages to monitor species of cetaceans (dolphins and whales) at specific points along the Pacific Coast of Guatemala (August, September).
 - With the GOG, developed the terms of reference for whale monitoring (May 2009).
 - CONAP has nearly completed a monitoring study of whale populations along the Guatemalan coasts to obtain biological data, seasonal and spatial patterns along these coasts, and the size of the populations observed. The findings of these studies will inform strategies for the conservation of these species and related sustainable tourism, as deemed feasible. DOI is assisting with certain components of the monitoring activities.
- CITES Species Habitat Protection: The Government of Guatemala (GOG) selected the Jaguar as its CAFTA Flagship Species, and at the GOG's request, DOI-ITAP is capitalizing on previous successful CAFTA work in the Mirador area in northern Guatemala, which contains one of the largest jaguar populations in Central America. DOI's efforts in this area focus on protecting this remaining jaguar habitat (under severe threat by poachers, illegal ranchers/settlers, etc.) through sustained working partnerships with local communities, NGOs, and the GOG. Activities to date include:

Community Patrolling Equipment Donations: WCS delivered basic field patrolling equipment, partially-funded by DOI, to the Carmelita Control and Vigilance Committee, as well as the Community's Tourism Committee (Apr 2009).

Equipping of GOG Park Guards: Equipment was purchased with DOI funds provided to IDAEH park guards in Mirador-Rio Azul National Park (MRANP) and CONAP and Balam staff in MRANP. Using DFID/WCS/BALAM funds, complementary investments were made to provide equipment to five CCVC groups (Melchor de Mencos, AFISAP,

Carmelita, Uaxactún, and Arbol Verde). Some equipment also was provided to park guards in eastern Laguna del Tigre (Apr 2009).

Minor Equipping of San Miguel Control Post: DOI has provided contingency and emergency funds to San Miguel Control Post to ensure its operation. The checkpoint in San Miguel will be completed with funds from the IDB loan for the Sustainable Development of the Peten (PDP) in the amount of \$ 200,000. Minimum equipment has been provided to ensure operation of the checkpoint (Apr 2009).

- Monitoring Framework and Indicators for Governance and Law Enforcement:
 - Monitoring Indicators: CONAP, DOI, Colombian Parks, WCS, and Balam are working together to harmonize the DOI CAFTA Indicators (governance, law enforcement, etc.) with WCS DFID Indicators (economic, civil society participation, etc.). These indicators will be used by field staff (from GOG, NGOs, and local communities), as they conduct their patrols through the MBR to continuously collect basic data that will allow monitoring and measurement of trends, threats, economic benefits, and improvements, with respect to the health of the ecosystems and the general human impact on the resources.
 - ***Institutionalization of Indicators: Asociación Balam, through their participation in the CCRBM, is promoting the institutionalization of key indicators by the Coordinating Committee of the MBR, in order to address major threats to governance in the reserve. These indicators will provide inputs to help update the Environmental Security Strategy (December 2009).***
 - ***Indicators near Completion: With the participation of the DFID governance program, select governance indicators have advanced from data baselines to graphic presentations to facilitate their presentation to decision makers and partners. Indicator development has advanced 85%, and many of the indicators have been included in a State of the Maya Biosphere Report currently under development. Final review, prioritization, and approval of the indicators is pending (December 2009).***
 - Indicators Advanced: A total of 59 governance indicators for the Maya Biosphere Reserve were identified between DOI/CAFTA-DR and the WCS/BALAM/DFID governance program. Of these 38 indicators correspond to the MBR Governance Concept Plan. As of the end of September, the development of viable baselines for measuring trends in governance is 80% completed (September 2009).
 - Summary Report on Status of MBR for Public Dissemination: WCS, Balam, DOI, USAID, and other partners have teamed to develop the “State of the Maya Biosphere Report” as a rapid analysis and outreach tool. A minimum of 5 indicators will be integrated into these analyses and processed into simplified graphic forms to be easily understood by the wider public, ensuring a greater impact (September 2009).

- Indicator Field-Testing Initiated: DOI, Colombian Parks, WCS, Balam, and FARES representatives refined and finalized the monitoring indicators, and baseline values have been established for more than half of the indicators through field testing. Significant progress has also been made jointly with the DFID project in the planning and development of information products such as reports, bulletins, presentations, and a page, that will be used to present the indicators to different audiences (June 2009).
- Field Patrol Data Form:
 - ***Institutionalization of the Field Protection Standardized Data Collection Form: Balam and WCS continued promoting the institutionalization and adoption of the Field Patrol Data Form by CONAP, with a target for final approval in January 2010, with its use fully incorporated by field staff of CONAP, IDAEH, DIPRONA, and NGO and community-based protection personnel in the first months of 2010.***
 - ***Validation Complete: The last validation exercise required to validate the “Bolta Unica de Patrullaje” (Field Protection Standardized Data Collection Form) was executed with the participation of CONAP, IDAEH, DIPRONA, the Environmental Prosecutors Office, the Office of Prosecutor of Crimes Against Cultural Heritage, and Army personnel (October 2009).***
 - Field Testing and Training on Patrol Data Form: The draft data form has been tested in three management units to date (Laguna del Tigre, Mirador-Rio Azul, and Carmelita). With the support of WCS, a centralized data base for the forms has been established at CONAP’s Center for Monitoring and Evaluation (CEMEC) and subsequent forms will be processed at CEMEC so that trends can be tracked over time. A final evaluation workshop is planned for October before introduction of the final version of the data form (August 2009).
 - A multi-sector workshop was held to "validate" the draft Field Patrol Data Form, to be used for collecting field data, including for the governance and security monitoring indicators, and with the participation of 55 resource guards (41 community guards; 6 CONAP guards, 5 CECON guards and 3 IDAEH guards). The workshop was led by 2 Colombian National Parks representatives, a WCS Technicians, 2 Balam technicians, and supported by 2 members of the Legal Department of CONAP. The Form is currently being field tested for a trial period prior to being officially recognized and approved by CONAP.

DOI met with Guatemalan authorities (MARN and CONAP) to coordinate logistical support for legal and operational training workshops, discuss the CONAP-driven process of developing tariff codes, and monitor the activities to be implemented with DOI assistance in Guatemala. (June 2009)

DOI facilitated an introductory meeting between CONAP and an International Iguana Foundation (IFF) representative, a new DOI partner who is in the process of conducting a 5-country iguana trade analysis (June 2009).

DOI met with Guatemalan authorities (MARN, CONAP, Ministry of Culture, Ministry of Defense, Institute of Tourism) at the Peten regional and Guatemala national level to update law enforcement needs in the MBR and gain consensus on general plan to use to explore for funds (June 2009).

Direct Community Participation in Biological Monitoring: WCS expanded its jaguar investigations (via camera trappings) to Tikal and is planning to expand in Mirador in mid October. DOI support allowed 20 local community members from Carmelita, Uaxactún, and Caoba to be hired and trained as technicians charged with installation, maintenance, and monitoring of the cameras to ensure their safety and functionality during both studies (September 2009).

Biological Monitoring of Jaguars and other CITES species:

- ***Jaguar Population Monitoring:** CONAP and IDAEH approved a formal permit application and protocol for biological monitoring at three sites. WCS has begun to implement field studies using the Reconnyx cameras purchased with DOI support. The Tikal survey has been completed and the Mirador study was also completed shortly before the Christmas holidays. Data are currently being analyzed. The third proposed study was cancelled upon the recommendation of the Yaxhá National Park Director due to significant illegal activity in the proposed sampling area of the park (ongoing).*
- ***Direct Community Participation in Biological Monitoring:** WCS camera trapping surveys in Mirador and Tikal were conducted with the support of local community members from Carmelita and Uaxactún that were hired and trained as technicians. Their responsibilities included the installation, maintenance, and monitoring of the cameras to ensure their safety and functionality during both studies (December 2009).*
- ***Evaluation of Jaguar Study:** Final results of the Mirador jaguar survey are being processed for evaluation; following report completion the final results will be synthesized in a format that is appropriate for dissemination within the village of Carmelita, with a particular focus on the Village Tourism Guides (December 2009).*
- ***Conservation Incentive Implementation:** The Carmelita Community Jaguar Reserve and the possible link to a community incentive program were explored with the Carmelita Concession Executive Council. Questions were raised about the compatibility of an incentives program with another initiative to obtain carbon sequestration financing through a mechanism for promoting Reduced Emissions from Deforestation and Degradation (REDD). WCS is coordinating a meeting with Rainforest Alliance and ACOFOP to address this question and look for synergies between these two possible sustainable financing mechanisms (December 2009).*
- A formal permit application and protocol for the monitoring investigations at 3 sites has been submitted to the GOG for approval. WCS has purchased cameras for sampling from RECONYX Inc. and the cameras are being sent via Embassy

Pouch. Mirador and Tikal will be surveyed simultaneously starting in the fall (April 2009).

- Jaguar Outreach and Education to Community:
 - ***Jaguar Interpretive Panels: WCS developed initial contact with a DOI environmental interpretation expert to develop plans for the production of interpretative panels on CITES Species in situ, with a particular focus on jaguars and the role of protected landscapes in their conservation, and for installation at the sites of Carmelita, Mirador, and Tikal (December 2009).***
 - New Study will help Strengthen Community Incentives for Jaguar Protection: WCS presented the plan to expand its jaguar population study at a Carmelita community assembly, receiving their enthusiastic support. At the community's request, WCS and Balam agreed to collaborate to help disseminate the results of the Jaguar study, particularly with members of the Carmelita Guide Association, to better inform tourists and visitors of the key role of the Carmelita-Mirador forests in conserving the jaguar and other CITES species (July 2009).
 - WCS presented the results of its own 2008 jaguar population study completed in the Carmelita forestry concession to the community of Carmelita and its newly-organized tourism Committee. Over 100 community members attended the occasion, which was a celebration of the collaboration between Carmelita and the Mirador-Rio Azul National Park. This information was used to educate and inform the Tourism Committee guides on the abundance of key species and motivate them to protect them (April 2009).

Legal Aspects of Law Enforcement Training Course: Balam led an Environmental Law summary course to approximately 40 representatives of the Control and Vigilance Committees (environmental security guards) from 10 MBR Forestry Concessions. The objective was to teach the participants what constitutes crimes against natural and cultural resources and the orientation of the use of a "Boleta," which is a form generated by the Colombian Parks/Balam/DOI partnership to help standardize data collection at the scene of a crime to maximize the possibility of successfully prosecuting the case subsequently (March 2009).

Security and Control MOU Signed with Communities: An MOU was signed between CONAP, WCS, Balam, and ACOFOP, the NGO representing community forestry concessions in the MBR, with DOI as a partner, to strengthen the Community Security and Control Committees. Under this MOU, DOI funds are designated for equipment purchase, training, and assistance with gaining CONAP accreditation (March 2009).

Equipping of Community Resource Guards: Under the MOU described above and through Balam, DOI contributed toward the purchase of equipment (GPS units, digital cameras, compasses, camping equipment for multiple-day patrols) for the Carmelita Community Security and Control Committee guards who are responsible for protecting

the natural and cultural resources within their own forestry concession (Resource Guards) (March 2009).

- Improved environmental protection from mining activities:
Three-Month detail requested to the US Embassy in Guatemala: The US Embassy Guatemala requested authorization to assign a senior science fellow to the Ministry of Environment and Natural Resources for three months to assist the Ministry of Environment in developing science-based regulations for the monitoring of water, air, and soil in and around mining operations. It is expected that OSM will provide that person but may not be approved until a new OSM Director is selected (ongoing).

Mine Permitting Training Course: Office of Surface Mining (OSM), a DOI agency, completed a one week training course titled Principles of Mine Permitting for a mixed class of 28 students from the Guatemalan Ministry of Environment and Natural Resources and the Ministry of Energy and Mines. The training was opened by Guatemala's Vice Minister for Environment and Natural Resources and the Director General, Ministry of Energy and Mines who both praised the recent cooperation between the two ministries. Guatemala is presently using the EIA/EIS process as its regulatory tool to manage the environmental effects of the mining sector with, according to the class participants, unsatisfactory results. This class offered a different approach to regulating the sector and provided practical guides to the participants on what information to require from companies seeking permission to mine and how to evaluate the company submissions (April 2009).

Cooperation between Ministries: During the week of training, the Vice Minister for Environment and Natural Resources and the Vice Minister, Ministry of Energy and Mines met to discuss how their two ministries could expand their recently established cooperation to other areas of overlapping interest and authority. The meeting concluded with each ministry agreeing that there were additional areas for cooperation and pledged increased cooperation and that respective staff would communicate these areas to their ministerial counterparts (April 2009).

Nicaragua

- Technical Assistance to Update CITES Law: DOI has initiated the process of updating Nicaragua CITES Executive Order (signed 1998) so that it conforms with the CITES legislative requirements, using a model recommended by the CITES Secretariat. The CITES management authority will lead and follow through with this effort (March 2009).
 - The Terms of Reference for a short-term legal consultant are being developed by MARN (April 2009).
- CITES Information Management: Equipment Delivered: DOI delivered computer and audiovisual equipment to the MARENA CITES authorities to strengthen its system of registration and control (see Annex 2 for Press Release and Equipment List) (September, 2009).

- Equipment Purchased: DOI has initiated the process of purchasing equipment (June 2009).
- Nicaragua's CITES management authority is in the process of updating its information management system by automating its registration process and associated documents related to CITES species trade. DOI is assisting by advising on system components and purchasing the necessary equipment (March 2009).
- CITES Webpage Creation: DOI is providing technical assistance to Nicaragua's CITES management authority on the creation of that country's first CITES Webpage. The first phase included recommendations on the webpage content (March 2009).
- Strengthening of CITES Enforcement Capabilities:
 - ***Enforcement Plan: The national plan to control illegal trade continued, with coordinated operations taking place at Matagalpa Beach and Nagarote Beach in Leon. These sites are in the illegal wildlife trafficking corridor (November-December 2009).***
 - With DOI support, MARENA is implementing the national plan to control illegal trade in Nicaragua, focused on sites or areas with higher incidence of illegal activity, including: local markets, street traffic lights in Managua, airports, and roadways emerging from protected areas. The plan will be implemented between September and December 2009 in partnership with the attorney general, environmental prosecutor, national police, and MARENA technical representatives. To date, two enforcement operations were successfully conducted, one each at the International airport and the Roberto Huembes market in Managua (September 2009).
- Feasibility Study for Frog Management Project: ***DOI, in coordination with the Nicaragua CITES Authorities, has drafted terms of reference and begun a work plan for a feasibility study on a community-based frog ranching project for Dendrobates species in Rio San Juan. A US Fish and Wildlife Service expert will provide technical advice to a local expert, the CITES authorities, and the local communities involved in the project (December 2009).***
- CITES Outreach and Communications Materials: ***DOI is supporting the Nicaraguan CITES Authorities to create posters with information about MARENA hunting regulations, including regulations for CITES species. The posters will be distributed in markets and other public places. DOI is currently reviewing an outline of the material (December 2009).***

SIGNIFICANT PROBLEMS OR DELAYS

- The political situation in Honduras required DOI to suspend several activities in that country, and in several cases prevented DOI from achieving performance indicator targets.

- DOI's collaborative effort with Humane Society International (HSI) to work through local NGO Grupo Jaragua to implement biological monitoring and protection systems for parrots has encountered coordination problems. Grupo Jaragua has been unresponsive to HSI's attempts at communication.

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

Regional

- ***Economic Valuation Study – CITES in Central America and the DR: A study that generated socio-economic arguments about the value of CITES management in the countries of Central America and the Dominican Republic. The report may support the political will necessary for the allocation of adequate resources for proper management; serve as a tool to support conservation and sustainable development in the region.***
- ***Update Regional CITES Listings: Update taxonomy listing and distribution in Central America and the Dominican Republic for the species of fauna and flora listed in the three CITES Appendices***
- ***Report on CITES Legal and Operational Capacity Building Workshops: Workshop report agreed upon and ready to be sent to CITES Secretariat as an informational document for the Conference of the Parties in Qatar (March 2010)***
- ***Informational material for COP March 2010: Produce a brochure containing information on the progress and results of the CAFTA-DR countries in partnership with DOI and CCAD for the COP***

Costa Rica

- ***CITES Coordination Meeting - Meeting of regional CITES technical committee to address regional priority issues, continue strengthening international coordination and communication, and address high priority topics to be discussed in the upcoming Conference of the Parties in Doha.***
- ***Outreach materials and information to the public about the regulations for the protection of endangered species (banners, posters, leaflets etc.)***

El Salvador

- ***Developing identification fact sheets for species to be identified by MAG and MARN. Presenting draft fact sheets for commentary. Producing final fact sheets.***
- ***Raise awareness of National Wildlife Policy Project in El Salvador: Review existing draft policy; hold workshops for raising awareness and for comments or recommendations; prepare and present the National Wildlife Policy***
- ***Develop a model municipal ordinance on wildlife protection: Develop a model municipal ordinance; present to MARN authorities; raise awareness about new model ordinance among municipalities***

Guatemala

- ***Capacity Building Workshop for customs Officials, CONAP, and SEPRONA officials***

- *Outreach materials and information to the public about the regulations for the protection of endangered species (banners, posters, leaflets etc.)*

Nicaragua

- *Meetings with President ProTempore of CITES technical committee - Organizing and preparing the agenda for technical committee meeting in Costa Rica*
- *Outreach materials and information to the public about the regulations for the protection of endangered species (banners, posters, leaflets etc.)*
- *Analyze and Update Nicaragua Wildlife Legislation: Analyze Nicaragua's national wildlife legislation; prepare proposed update of legislation*

DOI-ITAP will continue to conduct coordination meetings with key NGO and USG partners and will finalize a detailed workplan for the next three years and schedule of planned activities for the coming year.

ADDITIONAL INFORMATION

Reports describing the results of DOI-ITAP technical assistance in the CAFTA-DR countries are available upon request.

Central America/Dominican Republic • Mining Environmental Impact Assessments

SUMMARY OF ASSISTANCE

With funding from the U.S. Department of State, DOI-ITAP is working under the Central America/Dominican Republic Free Trade Agreement (CAFTA-DR) to bolster regional efforts to address the potential for increased environmental impacts from mining and extractive industries (e.g., logging). This technical assistance seeks to improve mining and other extractive industry environmental regulations based on best practices. A strengthened and more transparent environmental impact assessment (EIA) process will bolster private sector willingness to invest in CAFTA-DR countries, and will lead to increased predictability for project planners and private sector businesses looking to establish enterprises in Central America.

FUNDING

U.S. Department of State in FY 2007 (Funds received June 2008)

RESULTS TO DATE

- Frequent communication with Guatemalan Ministry for Environment and Natural Resources (MARN) and Ministry for Energy and Mines (MEM) continued during July, August, and September 2009 in preparation for future activities.
- Office of Surface Mining (OSM), a DOI agency, completed a one week training course titled Principles of Mine Permitting from April 13-17, 2009 for a mixed class of 28 students from the Guatemalan Ministry of Environment and Natural Resources and the Ministry of Energy and Mines. The training was opened by Guatemala's Vice Minister for Environment and Natural Resources and the Director General, Ministry of Energy and Mines who both praised the recent cooperation between the two ministries. Guatemala is presently using the EIA/EIS process as its regulatory tool to manage the environmental effects of the mining sector with, according to the class participants, unsatisfactory results. This class offered a different approach to regulating the sector and provided practical guides to the participants on what information to require from companies seeking permission to mine and how to evaluate the company submissions.
- During the week of training, the Vice Minister for Environment and Natural Resources and the Vice Minister, Ministry of Energy and Mines met to discuss how their two ministries could expand their recently established cooperation to other areas of overlapping interest and authority. The meeting concluded with each ministry agreeing that there were additional areas for cooperation and pledged increased cooperation and that respective staff would communicate these areas to their ministerial counterparts.
- The US Embassy Guatemala requested authorization to assign a senior science fellow to the Ministry of Environment and Natural Resources for three months to assist the Ministry of Environment in developing science-based regulations for the monitoring of water, air, and

soil in and around mining operations. It is uncertain whether OSM will provide that person and any final decision will likely be deferred until the new director is confirmed.

- DOI-ITAP, through technical experts from OSM, sponsored and hosted a successful mine study tour for ten Guatemalan officials and technical personnel in Colorado (September 2008). During the course of the study tour, representatives from each of the two ministries were paired so that communication between ministries could be opened and roadblocks lifted. Each day, the pairs were given assignments requiring collaboration, which they would then report on to the group. DOI-ITAP continues to receive regular updates from both Ministries, which included the following improvements in their operations:
 - Mine inspections are now being jointly performed;
 - Directors from both Ministries now hold regular meetings;
 - Both Ministries are beginning to look at jobs they can perform in common to reduce workloads and to extract pertinent information for day to day operations.
- DOI-ITAP met with new government officials in Guatemala to secure their input on their priorities to better customize the technical assistance (July 2008). A second meeting was held in San Salvador, El Salvador with the Vice Minister of Environment and Natural Resources and two Division Chiefs (metals and coal) from the Ministry of Mines to discuss our program in Guatemala and to determine El Salvador's interest in either joining the Guatemala training or developing their own. We were told the timing was bad for a new initiative and that there is a general dislike of mining.
- DOI-ITAP set up a USGS briefing on the Guatemalan mining sector for DOI and EPA staff expected to participate in DOI-ITAP's CAFTA-DR work on mining EIAs.
- A DOI-ITAP team participated in an EPA-led training session for 25 Guatemalan officials with responsibilities for aspects of drafting and reviewing EIAs. The training focused on improved techniques for developing and reviewing EIAs. The team observed the training and meeting with the 25 participants to gather information relevant to the upcoming DOI-ITAP project on EIAs for the mining sector in Guatemala. The team also conducted meetings with Senior Government and non-government representatives with responsibilities in the mining sector (November 2007).

SIGNIFICANT PROBLEMS OR DELAYS

There has been a delay in launching this initiative due to the change in administration of the Guatemalan Government.

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

None.

ADDITIONAL INFORMATION

Reports describing the results of DOI-ITAP technical assistance in the CAFTA-DR countries are available upon request.

Guatemala • Protected Area Management and Forestry Protection, Watershed Management, Biological Monitoring

SUMMARY OF ASSISTANCE

With funding from the U.S. Agency for International Development (USAID), DOI-ITAP is working to: (a) provide support in the prevention and fire management in Alta and Baja Verapaz; (b) strengthen capacity for protected areas management and conservation in the Sierra de las Minas Biosphere Reserve; (c) strengthen watershed management in the Sierra de las Minas Biosphere Reserve; and (d) support biological monitoring in the Maya Biosphere Reserve.

These activities support USAID/Guatemala Strategic Objective 520-022 Economic Freedom. They additionally aim to: (a) contribute in strengthening the actions taken to diminish forest fires in the high risks areas, identified and located in the regions of Alta y Baja Verapaz; (b) implement fire management actions in the Pine-Oak forests of the Sierra de las Minas Biosphere Reserve through building capacity for inter-institutional coordination and through organizing citizens in the critical communities for improved forest fire prevention and control; (c) support integrated watershed management, biodiversity conservation, and sustainable water use along the Motagua watershed system through the consolidation of the Water Fund (an innovative financial mechanism that allows for the development of sustainable resource management systems), in the Mesoamerican Reef (MAR) Ecoregion; and (d) support biological monitoring activities in the Maya Biosphere Reserve to evaluate the ecological stability of the reserve and the efficacy of USAID investments in the sustainable development of the area.

To complete these efforts, DOI-ITAP has partnered with three non-governmental organizations (NGOs):

1. The Fundación Defensores de la Naturaleza (FDN) is Guatemala's largest environmental NGO, working in the country for more than 25 years. Dedicated to biodiversity conservation and sustainable development, FDN supports more than 160 conservation projects in Guatemala and co-manages the following protected areas: Sierra del Lacandón National Park, Sierra de las Minas Biosphere Reserve, Bocas del Polochic Wildlife Refuge and the Naciones Unidas National Park. FDN is devoted to the conservation and sustainable development of the Semiarid Region of the Motagua Valley and to the development of the National Botanical Garden.
2. The Wildlife Conservation Society (WCS) saves wildlife and wild lands through careful science, international conservation, education, and the management of the world's largest system of urban wildlife parks. WCS supports more than 500 conservation projects in 61 countries around the world, gathering essential information on wildlife ecology, training future conservation scientists, and working with local communities and government agencies to develop conservation strategies.
3. The Cooperative Federation of the Verapaces (FEDECOVERA) is an autonomous cooperative organization consisting of 36 community associations of Q'eqchi and Pocomchi indigenous members, which has dedicated itself to the development and

continued improvement of the socioeconomic condition of its members by providing, among others, technical assistance to improve agricultural productivity, financial management, products marketing, health, education, and increase women's participation in all these aspects.

FUNDING

U.S. Agency for International Development FY 2009 (Funds received \$660,000 to date 2009)

RESULTS TO DATE

Protected Area and Forestry Protection:

FDN:

- Strengthened local capacity of community-based management units to prevent and control forest fires
- Executed 149 patrols that maintained 151.5 kilometers of fire breaks and concession demarcation borders
- Over 6,500 Verapaz residents were trained and sensitized on forest fire prevention, representing 60 communities, 59 schools and 13 cooperatives, male and female, and adults, young adults, and children.
- Over 50,000 Verapaz representatives were sensitized through various media, including: 2,000 almanac posters; 3,500 trifold brochures; and 4,524 coloring handbooks.

Success Story

FDN, through a partnership with DOI and USAID/Guatemala, engaged local communities to fight man-made forest fires in the Sierra de las Minas Biosphere Reserve, contributing significantly to the control of fires and detection of critical resource protection issues in the RBSM. The beneficiaries of the natural resources of the Sierra de las Minas were organized and trained in the prevention and control of forest fires. All project activities were conducted with gender equity, and promoted the participation of women and youth in environmental issues in the region. Local committees successfully gained control of a total of 67 control forest fires, affecting an area of 2.137 hectares of forest, of which 1.807 hectares were mixed forest. Committees also coordinated prevention activities that contributed to the preservation of mixed forest by reducing forest fires in the watersheds covered by the project.

- Fire prevention radio messages posted in 3 languages were broadcast, covering 100% of Alta and Baja Verapaz, as well as Huehuetenango, Quiche, Izabal, Zacapa and El Peten.
- Seven Verapaz brigades were trained with assistance from the Sistema Nacional de Prevención y Control de Incendios Forestales (SIPECIF), using the "Bombero Forestal" handbook generated by USAID in 2001.
- The completion of 155 kilometers of black lines and fire breaks and 1,200 hectares of prescribed and controlled burning successfully reduced forest fires in Sierra de las Minas.

Success Story

With support from U.S. Agency for International Development/Guatemala and the U.S. Department of the Interior, Defensores de la Naturaleza work with local communities and established preventive measures designed to control forest fires in strategic locations to prevent blazes from spreading from the lower zones of the watersheds. Prescribed burns were applied to strategically selected sites within different watersheds of the Sierra de las Minas to: (1) expand protective fire breaks through the removal of accumulated fuel in naturally regenerated young forests; (2) protect forested watershed recharge zones; and (3) expand strategic barriers to prevent fires originating in the valley from ascending the mountain slopes of the reserve. Moderate burns are less damaging to the trees and the process of natural regeneration than forest fires that occur during the driest and hottest days of the year. The project has successfully reduced forest fires through the completion of 155 kilometers of black lines and fire breaks and 1,200 hectares of prescribed and controlled burning.

FEDECOVERA:

- Identified and located communities in areas vulnerable to forest fires.
- Raised awareness of 6,298 individuals, including children, youth, women, and men, using talks and teaching materials. FEDECOVERA additionally performed outreach through print and radio announcements on the importance of forests, forest fire prevention, and tips for agricultural burning.
- Distributed 18,711 trees to 4,4479 individuals for planting on their land and at local schools.

Biological Monitoring:

WCS:

- WCS created a new Monitoring Roundtable Web Site (www.selvamayamonitorio.org) to be used by all stakeholders for information sharing and identify areas requiring immediate intervention by the GOG to ensure the maintenance of forest cover and target species.
- WCS successfully verified the presence of mahogany (*Swietenia macrophylla*) and Spanish cedar (*Cedrela odorata*) seed trees in the three forest concessions.
- WCS continued with the organization of the Monitoring Roundtable led by CONAP and with WCS in charge of the Roundtable Secretary.
- In collaboration with USAID/Global Conservation Program, WCS and CEMEC/CONAP produced deforestation estimates and analyses for the 2008-2009 period using LANDSAT ETM SLC off images as the main input of the analyses. These analyses allow the Guatemalan Government and partner organizations to evaluate the conversion of MBR forest cover to agricultural and pastoral uses, thereby providing key information to improve management decisions and evaluate the effects of conservations actions across the MBR.
- In collaboration with USAID/Global Conservation Program, MODIS fire pixels were used to monitor forest fires in near real-time in the MBR, weekly reports were produced and distributed to CONAP, WCS, SIPECIF, other institutions and the general public. The reports were made available to interested parties using an email list via the web as a collaboration of CATHALAC/SERVIR. In addition to weekly updates, a general outlook

of the 2009 fire season was prepared and presented to several institutions (CONAP, WCS, BALAM, SIPECIF, Gobernación Departamental, among others) and general public with the objective of providing the basic information needed to plan for the season in fire prevention and control.

- WCS conducted a pilot study to determine primate (howler and spider monkeys) abundance in Yaloch Forest Concession.
- WCS conducted two jaguar surveys in the MBR: the East of the Mirador-Río Azul National Park (MRANP) and Yaloch Forest Concession. The objectives of these studies were: (1) estimate jaguar abundance in the East of MRANP and Yaloch Forest Concession, (2) provide new data to improve the actual Habitat Quality Model for jaguars in the Maya Forest focusing in MRANP and Yaloch Concession and (3) strengthen institutions alliances to conserve jaguar population in the Maya Biosphere Reserve.
- WCS conducted a study to (1) estimate relative abundance of fauna that visited water holes (known as aguadas) using camera traps, especially tapirs and white lipped peccaries, (2) estimated daily activity patters of these fauna, and (3) strengthen alliances between institutions to conserve the fauna that visit aguadas in Mirador-Río Azul National Park (MRANP) in the Maya Biosphere Reserve.

Watershed Protection:

FDN:

- FDN generated a guidebook as a tool for promoting and training communities residing in the watersheds on how they can organize and be legally recognized as Watershed Committees, facilitating their active participation in watershed management and conservation.
- The San Jeronimo Municipality is initiating the implementation of a recently passed regulation that allows a portion of the water usage proceeds to go toward the protection of the Sierra de las Minas cloud forests, from which the water originates, and to implement best practices for soil use in the high elevation areas of the same watershed.
- FDN Developed “Operations Manual for Local Water Fund Sub-grants, Motagua-Polochic Region” to improve management of the sub-grants.
- FDN entered negotiations with the MARN Water Resources unit to form a strategic alliance for completion of a register of wáter resources in the Motagua Valley to the south of Sierra de las Minas.
- FDN promoted of a integrated, non-sectoral view of wáter based on reliability, quality, and quantity, which will allow local organizations to work together more effectively.
- By promoting watershed committees, FDN has introduced local organizations to the concept of a watershed, which helps explain more clearly the connection between cloud forests of the Sierra and the soil and fresh water available in the lowlands of the Sierra de las Minas, and also provides a specific reference point for relating wáter users outside the protected area boundaries with the conservation of forests and soil within the reserve.

SIGNIFICANT PROBLEMS OR DELAYS

None.

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

None.

ADDITIONAL INFORMATION

Reports describing the results of DOI-ITAP technical assistance in Guatemala are available upon request.

Eastern Caribbean • Resource Protection

SUMMARY OF ASSISTANCE

Under a Memorandum of Understanding with the Organization of American States (OAS), DOI-ITAP is working with the American States to implement a technical assistance program of natural and cultural resource conservation in sites with tourism potential. This agreement was formalized in 2008. In particular, this capacity-building program focuses on working with the governments of the Eastern Caribbean and the private sector to mitigate the negative impacts of tourism on the biodiversity resources of the region.

FUNDING

OAS FY 2009 and onward on a reimbursable basis

RESULTS TO DATE

Mitigating negative impacts of tourism:

A DOI-ITAP adviser traveled to St. Lucia to co-lead a training workshop on biodiversity impacts of tourism. The workshop covered topics such as carrying capacity of tourism sites, developing biological indicators, valuating ecosystems, and monitoring the negative impacts of tourism on biodiversity. The audience included natural resource specialists and public planners from six Eastern Caribbean countries (Antigua, Dominica, Grenada, St. Kitts-Nevis, St. Lucia and St. Vincent). The workshop was held in coordination with the Organization of Eastern Caribbean States (OECS) and is part of a larger regional effort to protect biodiversity and promote tourism. The DOI-ITAP advisor led a case study session using the Florida Keys as an example for conducting a scientific carrying capacity study. The workshop was the first of several anticipated projects related to mitigating biodiversity impacts of tourism. (June 2009).

SIGNIFICANT PROBLEMS OR DELAYS

None

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

DOI-ITAP advisers will travel to St. Lucia to train Grenada Ministry of Tourism officials and private sector tourism operators. DOI-ITAP advisers will conduct a training workshop on ecotourism and mitigating the negative impacts of the tourism industry.

ADDITIONAL INFORMATION

Reports describing the results of DOI-ITAP technical assistance in the CAFTA-DR countries are available upon request.

Trinidad and Tobago • Ecotourism

SUMMARY OF ASSISTANCE

With funding from the U.S. Department of State, DOI-ITAP is working with the Government of Trinidad and Tobago (GOTT) in support of ecotourism guidance and recommendation for stakeholders in Trinidad and Tobago.

FUNDING

U.S. Department of State in FY 2009 (Funds received in September 2009)

RESULTS TO DATE

DOI-ITAP advisers traveled to Port of Spain to perform a general assessment of the tourism industry and its impacts and to liaise with GOTT counterparts and other stakeholders. Team members met with representatives from the GOTT Ministry of Tourism and the Ministry of Public Utilities and the Environment and representatives from NGOs. Team members discussed tourism and tourism development, focusing on (a) ecotourism and (b) how tourism affects the environment and biodiversity and how to mitigate negative impacts of the tourism industry (September 2009).

SIGNIFICANT PROBLEMS OR DELAYS

None.

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

None.

ADDITIONAL INFORMATION

Reports for DOI-ITAP work in Trinidad and Tobago are available upon request.

Georgia • Protected Areas Development, Phase II

SUMMARY OF ASSISTANCE

DOI-ITAP has established a long-term working relationship with the Republic of Georgia to foster a national system of protected areas in Georgia. The working relationship was formalized in a Memorandum of Understanding signed in 1999 which created a general technical assistance program and a specific sister park relationship. With funding from USAID/Georgia, DOI-ITAP is providing broad technical assistance at the headquarters level to establish a national training center and a national training program focused on issues of park system management, administration, and personnel management. DOI-ITAP is also providing field-level technical assistance and training.

FUNDING

USAID/Georgia in FY 2009

USAID/Georgia in FY 2007

USAID/Georgia in FY 2006

USAID/Georgia in FY 2005

RESULTS TO DATE

Administration

DOI-ITAP completed the contracting process to hire an in-country coordinator for the project. Paata Shanshiashvili now serves as the project's in-country coordinator (August 2006).

Demonstration Sites

A DOI-ITAP traveled to Georgia to assess the proposed Tbilisi and Racha National Parks as visitor service-focused demonstration sites. The team's report contains recommendations for visitor services activities system-wide as well as at the two demonstration sites (October 2006).

A DOI-ITAP team of landscape architects and engineers traveled to Tbilisi National Park to develop conceptual designs for the proposed visitor center and park administrative structures. The team also developed a training module that would assist APA managers in planning for major infrastructure projects (June/July 2008).

Fire Management

A four-person team traveled to the Republic of Georgia to assist the Agency for Protected Areas (APA) in setting up a wildland fire recovery program and conducted introductory fire suppression training. After receiving an initial briefing and orientation, the team worked with APA staff, local specialists and Borjomi National Park personnel. In conjunction with local experts, the ITAP team developed a burned area recovery plan outline and template to serve as a guide for future needs. Suppression training consisted of lectures and field exercises covering basic hand-crew suppression techniques and introductory fire behavior, approximating the United States' fire courses S130 and S190. In addition, the team presented an introductory course to fire ecology. (April-May 2009)

DOI-ITAP began the initial planning for teams to travel to Georgia in order to address the critical need for increased fire management planning and training, as identified after the armed conflict with Russia. Additionally, DOI-ITAP secured the donation of surplus fire fighting equipment and will arrange for shipment to Georgia. The equipment is standard personal protection equipment (PPE) issued to federal firefighters. It includes protective shirts and pants, gloves and a safety helmet and headlamp. Also included is a Pulaski, which is a combination of an ax and hoe, and firefighting shovels and rakes. The Department is also sending basic wildfire suppression training materials with Georgian translation (August 2008). A follow-up team conducted fire planning and leadership training, introduced proposals for a multi-agency fire coordination group, assisted with fire equipment purchases, and developed fire management guidelines (January/February 2009).

Training Center and Training Program Development

DOI-ITAP fielded a team to provide assistance to the Ministry of Environmental Protection and Natural Resources in establishing a National Training Center within the Ministry's headquarters. The team worked with the appropriate Ministry personnel to conduct an assessment of the Ministry's current needs and facilities and also assisted with the initial planning and operational aspects of the proposed training center. The team also assessed priority needs to be addressed by a comprehensive training program for Ministry staff and developed training modules for priority topics (August 2006).

DOI-ITAP conducted a study tour to the U.S. for a group of Government of Georgia representatives, including the Minister of Environmental Protection and Natural Resources. A meeting between the Georgian Minister and Secretary Kempthorne was conducted, during which a Memorandum of Understanding for further cooperation was signed. The delegation visited the National Conservation Training Center in West Virginia, the National Mall, Point Reyes National Seashore, during which a Sister Parks Agreement was signed with Kolikhiti National Park, and Yosemite National Park (May 2007).

GIS Training

DOI-ITAP sent a team of wide GIS specialists to Tbilisi to provide assistance to the Ministry of Environmental Protection and Natural Resources in enhancing/developing new protected areas Geographic Information System. The team conducted an assessment of the Ministry's GIS needs and capabilities and provided follow-up recommendations (May 2006). This visit informed another two-person team that traveled to Tbilisi in February/March 2009 to conduct Geographic Information System training for Georgia's Ministry of Environmental Protection and Natural Resources. The team presented the NPS' Introduction to ArcGIS 9.2 course to 23 students, worked intensively with seven advanced GIS students, conducted a brief Manager's Awareness presentation on GIS, global positioning systems and remote sensing for MOE staff, and traveled to Vashlovani National Park to work with that Park's GIS specialist (also one of the advanced students).

Planning

Development of Work Plan: DOI-ITAP sent a team to Tbilisi in October 2005 to put together a work plan for DOI-ITAP technical assistance to the Ministry for FY 2006. During and after the trip, DOI-ITAP has consulted with USAID/Tbilisi, the Ministry of Environment Protection and Natural Resources, and key conservation NGOs based in Tbilisi to create a comprehensive work plan for FY 2006 that will lead to additional activities in FY 2007 to support the Ministry's goals. The work plan details four major areas of technical assistance identified as major Ministry priorities including the:

- Development of a Ministry-wide training center and employee training program;
- Assessment of current and future needs for GIS data and applications;
- Development of a protected areas outreach plan; and
- Development of an urban and rural protected area demonstration site.

National Outreach Plan: DOI-ITAP has identified a team that can develop or review a national outreach plan, if requested by the Ministry.

Environmental Legislation Analysis

The DOI-ITAP team issued a final report of recommendations (July 2007).

A DOI-ITAP team of two environmental legislative analysts conducted a comprehensive assessment of Georgia's protected areas and related legislation, conducted workshops with representatives of national-level institutions to garner agreements on strategic principles and develop national-level management policies, and have provided recommendations on protected areas management policies and legal amendments (April 2007).

A team of legislative experts traveled to Georgia to provide additional recommendations following the assessment issued in July 2007. The team worked closely with lawyers within the Ministry of Environmental Protection and Natural Resources to produce a draft amendment package for Georgia's protected areas legislation. This draft amendment

package was based on the recommendations developed by the team during the previous assessment trip. The draft package of amendments was referred to the Ministry for formal comment in December 2007 and the report was finalized shortly thereafter.

Leadership and Management

A DOI-ITAP team of two technical experts traveled to the Republic of Georgia to work with Georgia's Ministry of Environment and Natural Resources. DOI-ITAP technical experts provided general advice to the Agency for Protected Areas (APA), within the Ministry of Environment and Natural Resources, in managing the country's system of protected areas; designed and delivered training that addresses protected areas administration, including general office management, budgeting and fiscal management, and leadership/managing human resources, developing operational plans, and other aspects of management (December 2009).

A DOI-ITAP team of two traveled to Tbilisi, Georgia to deliver instruction on leadership and management practices to the Ministry of Environmental Protection and Natural Resources, with special attention to the Ministry's Agency of Protected Areas. Over the two-week period the team developed and delivered a customized training course titled "Introduction to Effective Management" for 31 students. In addition, the team led a train-the-trainer workshop for 4 of the Georgian students to prepare them to deliver the training in the future. (May-June 2009)

Visitor Services

A DOI-ITAP team of two traveled to Tbilisi, Georgia to deliver instruction on visitor services to park directors and members of the Ministry of Environment Protection and Natural resources, with special attention to the Ministry's Agency of Protected Areas. Training occurred over a two-week period in Tbilisi and at field sites. (June 2009)

Transboundary Management and Protected Areas on Private Lands

A DOI-ITAP technical expert on transboundary protected area management traveled to Georgia and collaborated with Georgia's Ministry of Environment and Natural Resources staff to lead a roundtable discussion on transboundary protected area management at a high-level event with Georgian, Turkish, and U.S. Government officials to commemorate their collaborative efforts on gazelle reintroduction in the Republic of Georgia (December 2009).

A delegation from the Republic of Georgia's the Ministry of Environment Protection and Natural Resources came to the U.S. for an 11-day study tour focused on two areas: 1) trans-boundary protected area management, and 2) best practices with respect to establishing state-owned protected areas on privately held lands. The tour showcased how NPS entered into and maintains its cooperative relationship with Canada at the Waterton-Glacier International Peace Park, and how the BLM manages its business and working relationships with private land holders with pre-existing property rights within

and adjacent to its property on the Agua Fria National Monument. As part of the study tour, the delegation met with officials at DOI headquarters, the FWS National Conservation Training Center, Glacier National Park, Grand Canyon National Park, the BLM National Training Center, and Agua Fria National Monument. The study tour provided U.S. models of management in areas of interest to the delegation in order to help generate ideas as they continue to build and develop Protected Areas in Georgia. Delegates additionally took interest regarding the charging recreation fees and establishment of concessionaire operations. In addition to the technical agenda, delegates participated in recreational activities, including kayaking on Antietam Creek, hiking in Glacier and at the Grand Canyon, rafting on the South Fork River in Montana, and visiting Native American petroglyphs (September 2009).

Resource Protection

DOI-ITAP resource protection advisers traveled to Tblisi and the Lagodeckhi Protected Area provided a course entitled Introduction to Ranger Operations. Advisers delivered approximately 34 hours of training to more than 40 employees of the Agency for Protected Areas. Subjects covered included Risk Management, Tracking, Survival, Officer Safety, Managing the Lost Person Incident, Managing Public Recreation, and Wildlife Crime Investigation and Prevention. Classes were delivered in a classroom setting and supplemented with tabletop exercises, small breakout groups, and field exercises (July 2009).

DOI-ITAP advisers traveled to Tbilisi and met with the Georgia Agency for Protected Areas (APA) Deputy Director, several legal staff, and the Inspector General for the Ministry of the Environment to discuss the APA and its successes and challenges (July 2009).

Gazelle Reintroduction

DOI-ITAP facilitated a high-level event with Georgian, Turkish, and U.S. Government officials to commemorate collaborative efforts on gazelle reintroduction in the Republic of Georgia, for which DOI-ITAP provided support (December 2009).

DOI-ITAP has assisted the Government of Georgia with infrastructure to house pregnant gazelles that have been donated by the Government of Turkey to assist Georgia in the reintroduction of these species (August 2009).

SIGNIFICANT PROBLEMS OR DELAYS

None.

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

Planning is underway to send a technical assistance team to the Republic of Georgia to train the Ministry of Environmental Protection and Natural Resources on grant-management and partnership skills.

ADDITIONAL INFORMATION

Reports describing the results of DOI-ITAP technical assistance in Georgia are available upon request.

Middle East & North Africa

Jordan • Cultural Resource Interpretation

SUMMARY OF ASSISTANCE

In June NPS and Bureau of Land Management (BLM) personnel traveled to Dana Biosphere Reserve. One team member focused on overall management issues for the park and made recommendations for ways to improve planning and management for the reserve. The other member evaluated current environmental education programs in the reserve and developed plans for expanding and improving the programs, particularly those intended for children. (June 2009).

In July three managers from Dana Biosphere Reserve and one from Wadi Rum Nature Reserve traveled to the United States for a two-week study tour on the management of protected areas. In the first week, the four traveled to several parks and reserves in the southern California desert. The chosen sites have environments similar to the reserves in Jordan. The participants learned about site management and planning, education and interpretation, visitor service and wildlife conservation as done by the National Park Service, the Bureau of Land Management, and the Fish and Wildlife Service. The Dana managers remained a second week when they will be closely observing operations at the San Diego Wildlife Refuge Complex in order to see in detail all the aspects of management that were discussed in the first week. During this time, the Wadi Rum manager will observe the FWS California Condor Recovery Program in order to gain an understanding of procedures involved in protecting nearly extinct species and reintroducing them to former habitats (July 2009).

The four U.S. Park Rangers who previously developed the Ranger Training Program for Petra returned to conduct training for the first 35 newly hired rangers. The training covered the roles and duties of park rangers including interpretation, law enforcement, search and rescue, concessions management, ranger uniforms, and other standard operating procedures and ranger responsibilities. The trainers developed a Park Ranger Manual which was translated into Arabic and was distributed to the newly hired rangers and which will be available on the JPP website. (May 2009).

In March 2009, ITAP and several institutions in Jordan signed an agreement to form the Partnership for Environmental and Cultural Tourism to be funded by USAID. The partnership will strengthen the capacity of cultural and environmental tourism sites to enhance the visitor experience while assuring that the existing environmental, natural and cultural resources are protected.

On July 7, 2007, Petra Archeological Park increased its renown by becoming one of the New Seven Wonders of the World in worldwide voting. In spring of 2008, USAID/Jordan provided funds for the Department to continue its thirty plus years of working at Petra, specifically implementing one of the key components of the Operation Plan developed in 2000, that of developing a professional ranger program for staffing the park. The park ranger program is

designed to protect park resources, assist management with accomplishing goals and implementing policies, and ensure safe, enjoyable, and world class tourist visits.

FUNDING

USAID/Jordan. In February 24, 2009 a new grant was approved from USAID to provide funding for FY2009-FY2013.

RESULTS TO DATE

Three Jordanians, two from the Royal Society for the Conservation of Nature (RSCN) and one from Friends of the Earth Middle East traveled to the U.S. on a Desert Wetlands Study Tour. The group visited Bosque del Apache National Wildlife Refuge in New Mexico and the Desert National Wildlife Refuge Complex in Nevada in order to study issues related to managing desert wetlands. The participants observed and discussed management protocols with personnel from the U.S. Fish and Wildlife Service. The topics covered included waterfowl habitat management, native fish recovery programs, invasive species management, visitor services, community involvement, environmental education, law enforcement, and research and monitoring. (December 2009).

DOI-ITAP received a request for assistance from the USAID Jordan Tourism Development Project II to conduct a technical analysis and recommend a Model for environmentally friendly tram shuttle service on Turkmaniya Road exit of the Petra Archeological Park (PAP). A 2 person was sent to PAP for one week. They developed a report which proposes a draft conceptual model to deploy a shuttle service to serve as an alternative exit considered by the PAP management (Turkmaniya exit). The proposed model includes: Assessment of the viability of the proposed exit in conjunction with the existing transport modes within park, visitors' circulation trends and park's carrying capacity and an evaluation the most feasible type of environmentally friendly vehicles to be deployed from the base of PAP to Um Sayhoun, along with costs and general operational and maintenance requirements.

Seven Jordanian officials from RSCN traveled to U.S. to attend a workshop on park interpretation and education at the National Conservation Training Center in Shepherdstown, WV. The workshop was led by two National Park Service Rangers and covered topics in of site interpretation and education and the participants all completed projects to put the techniques discussed to practical use. (November 2009).

A two-person team from the U.S. traveled to Petra Archeological Park to review and inspect horse use in the park and make recommendations regarding the horse use. This project was in response to many complaints from tourists about improper treatment of the animals. The team developed recommendations on how the park can proceed on this issue and submitted a report to the park. There will be follow-up trip in April 2010 when one of the horse experts will be sent back for a month-long stay at Petra to assist the park in implementing the recommendations. (October 2009).

Three managers from Dana Biosphere Reserve and one from Wadi Rum Nature Reserve traveled to the United States for a two-week study tour on the management of protected areas. In the first week, the four traveled to several parks and reserves in the southern California desert. The chosen sites have environments similar to the reserves in Jordan. The participants learned about site management and planning, education and interpretation, visitor service and wildlife conservation as done by the National Park Service, the Bureau of Land Management, and the Fish and Wildlife Service. The Dana managers remained a second week when they will be closely observing operations at the San Diego Wildlife Refuge Complex in order to see in detail all the aspects of management that were discussed in the first week. During this time, the Wadi Rum manager will observe the FWS California Condor Recovery Program in order to gain an understanding of procedures involved in protecting nearly extinct species and reintroducing them to former habitats (July 2009).

Two DOI personnel traveled to Dana Biosphere Reserve. One team member focused on overall management issues for the park and made recommendations for ways to improve planning and management for the reserve. The other member evaluated current environmental education programs in the reserve and developed plans for expanding and improving the programs, particularly those intended for children. (June 2009).

The visit in June also evaluated the entrance fees program procedures and produced an analysis and then at the request of the Ministry prepared a draft acquisition program for an entrance fees system, including standards for ticketing. (June 2008).

The four Park Rangers who previously traveled to Jordan returned to conduct training for newly hired rangers. The training covered the roles and duties of park rangers including interpretation, law enforcement, search and rescue, concessions management, ranger uniforms, and other standard operating procedures and ranger responsibilities. The trainers developed a Park Ranger Manual which was translated into Arabic and was distributed to the newly hired rangers. (May 2009).

In June 2008, four park rangers went to Petra to develop a manual that offers guidance for both program development and implementation. It establishes a philosophical foundation for the mission and core values of Petra Archeological Park rangers, explains why rangers need to be empowered with law enforcement authority, and identifies actions necessary for such authority to occur. The manual offers a recommended park ranger organization, including staffing, qualifications, and duties, and presents a training curriculum designed to provide the essential knowledge and skills needed to perform these duties. It recommends rangers wear uniforms, provides recommended uniform standards, and lists essential equipment needs, specifications, and costs. The manual includes standard operating procedures for common duties and responsibilities, discusses the relationship of the park ranger force with other agencies and groups, and provides radio communication and written report recommendations. Finally, the manual outlines the steps necessary to implement these recommendations.

The draft Park Ranger Management Manual was completed in June and presented to the Ministry of Tourism and Antiquities. It is being translated into Arabic. (June 2008)

Program Coordination:

- NPS and BLM officials mentioned above, as well as the the Director and Deputy Director, met with senior staff at Wadi Rum to develop cooperative programs over the next year (June 2009).
- An agreement between DOI/ITAP, USAID, and several organizations in Jordan was signed, creating the Jordanian Partnership for Environmental Tourism (March 2009).
- In order to operate efficiently and avoid duplication, an in-country Jordanian Partnership Coordinator based in Amman was hired in March 2009 to constantly monitor opportunities to collaborate and develop synergies with other projects, maintain a web site on the project and arrange all the logistics of the incoming DOI experts to Jordan and study tours to the U.S. The Coordinator is responsible for drafting quarterly programmatic reports on the status of the project for USAID. The Coordinator is operating out of the offices of Wild Jordan, one of the Partnership organizations and the commercial wing of the Royal Society for the Conservation of Nature (RSCN).
- A scope of work was developed to detailing the organization of the program and the tasks for the first year.

SIGNIFICANT PROBLEMS OR DELAYS

None

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

- *Arrangements will be made for personnel for Wadi Rum Nature Reserve to travel to the U.S. to establish a sister relationship with California desert sites. The areas of concern will be:*
 - *4WD (four-wheel drive) issues, such as methods to protect the desert environment while allowing 4WD tourism.*
 - *Concession standards for accommodations*
 - *Carrying capacity of sites*
 - *Captive breeding programs*
 - *Enhancing the unique Bedouin experience for visitors*
 - *Community outreach*
- *The Jordanian Partnership Coordinator and DOI/ITAP personnel in consultation with Jordan's Ministry of Tourism and Antiquities, the Royal Society for the Conservation of Nature, Wild Jordan, and personnel from Petra Archaeological Park and the Dana and Wadi Rum Nature Reserves, will develop the projects to be carried out during the five-year life of the program.*

ADDITIONAL INFORMATION

Reports describing the results of DOI-ITAP technical assistance in Jordan are available upon request.

Middle East/North Africa • CITES Capacity Building

SUMMARY OF ASSISTANCE

Under an Interagency Agreement between the State Department and the U.S. Department of the Interior's International Technical Assistance Program (DOI-ITAP), DOI-ITAP is providing technical assistance to countries in the Middle East and North Africa (MENA) region to promote transparency and support adherence to the Convention on International Trade in Endangered Species (CITES), in support of negotiations and implementation of free trade agreements (FTAs) between the United States, Bahrain, Morocco and Oman, Trade and Investment Framework Agreements (TIFAs) between the United States and countries in the MENA region, and Science and Technology Agreements (STAs) between the United States and MENA countries.

FUNDING

State Department, Office of Middle East Partnership Initiative FY 06

RESULTS TO DATE

The Agreement with the State Department was signed September 9, 2007.

Program Coordination:

- Finalized comprehensive work plans in Oman and Jordan to cover all aspects of CITES implementation, including strengthened legislation, improved functioning of the Management and Scientific Authorities, strengthened wildlife law enforcement, enhanced ability of NGOs to undertake protected areas and endangered species management projects and to engage local communities in endangered species conservation (September 2008).
- Completed a comprehensive desk survey of the status of CITES in each potential target country (November 2007).
- Met with Jordanian delegation to explore ecotourism and endangered species opportunities in the region (November 2007).
- Launched effort to bring selected individuals from Jordan, Morocco, Oman and Bahrain to participate in a joint initiative with the National Park Service to bring selected professionals from the region to receive in-depth, hands-on, on-the-job training on all aspects of protected area management (November 2007).

Key Objectives

Establish necessary legal framework to enable functioning CITES implementation in selected countries

Background: CITES is not a self-implementing treaty, and each party must adopt domestic legislation to implement key provisions of the Convention at the national level. The CITES Secretariat has launched a National Legislation Project to evaluate each nation's progress in implementing such legislation. Under the Project, countries are ranked from one to three, with one indicating that the country has fully implemented CITES in their domestic legislation and

three indicating that there is either no legislation or that there are significant weaknesses in the existing legislation.

- As part of the national-level CITES capacity building workshop in Oman, ITAP facilitated dialogue between the Omani authorities and the United Arab Emirates (UAE). UAE has successfully revised its CITES implementing legislation in recent years and is ranked as a category one country under the National Legislation Project of the CITES Secretariat. The UAE has provided documents to Oman that outline their legislative reform process as well as a copy of their CITES implementing legislation. Representatives from the two countries committed to working together as Oman drafts its own domestic CITES laws. As a new party, Oman has not yet been ranked by the Project (March 2009).
- ITAP team traveled to Morocco to discuss the status of Morocco's CITES implementing legislation. Morocco is currently listed in category three under the Project, the lowest possible ranking indicating that their legislation has significant weaknesses and is not sufficient to implement the Convention. The ITAP team explored options for improving Morocco's categorization and since the conclusion of the trip has facilitated direct consultation between the CITES authorities in Morocco and legislative experts in the CITES Secretariat (January 2009).
- ITAP Program Manager completed a two-week detail with the CITES Secretariat and developed a plan of work with the Secretariat to include joint activities to strengthen CITES implementing legislation in the target countries (July 2008).
- Worked with Jordanian officials in Amman to identify areas of future technical assistance in strengthening CITES implementing legislation in order for Jordan to obtain a category one classification under the CITES National Legislation Project (June 2008).
- Worked with Bahraini officials in Manama to identify areas of future technical assistance in strengthening wildlife law enforcement and other environmental legislation, as well as to assess the status and interest of Bahraini accession to the Convention (June 2008).
- Worked with Omani officials in Muscat to identify areas of future technical assistance in developing CITES implementation and other endangered species related legislation, as well as legislation to develop a series of new protected areas within the Sultanate (April 2008).
- Began initial legal review of proposed CITES strengthening legislation in Jordan (March 2008).

Improved CITES Management and Scientific Authorities in selected countries

- *ITAP hosted an Omani Conservation Fellow, who was studying CITES implementation and sea turtle conservation in the U.S. ITAP coordinated a training program that included: intensive one-on-one training with the US CITES Management and Scientific Authorities; participation in a CITES public consultation; observation of CITES inspections with the FWS at JFK airport; and a one-week field visit to conservation sites in Florida (December 2009).*
- *ITAP conducted a regional-level workshop for CITES Scientific Authorities from throughout the Middle East and North Africa region. This workshop was held in*

Rabat, Morocco and built upon the CITES Management Authorities workshop that ITAP conducted in Oman in March 2009. The training was delivered by a representative from the capacity-building unit of the CITES Secretariat, who was assisted by a representative from the US Fish and Wildlife Service's CITES Scientific Authority. Moroccan organizations represented included the High Commission for Water and Forests, the Agricultural and Veterinary Institute, the Center for Forest Research, the National Institute for Marine Research and University Mohammed Cinq. Regional representatives included officials from Algeria, Bahrain, Jordan, Kuwait, Lebanon, Oman, Qatar, the UAE, and Yemen. Non-governmental organizations were present from Lebanon and Jordan.

During the workshop, both Lebanon and Bahrain indicated that their respective governments were moving towards joining CITES.

Topics covered in the workshop included:

- ***Introduction to Science in CITES***
- ***The Animals and Plants Committees***
- ***Functions of the Scientific Authority***
- ***Scientific Authorities in the MENA region***

- ***Production systems***
- ***Conducting non-detriment findings***

- ***The role of quotas and how to set quotas***
- ***Captive breeding / artificial propagation***
- ***Adaptive management***

- ***Significant trade review***
- ***Disposal of confiscated specimens***
- ***Identification of specimens***
- ***Listing criteria, formulating proposals, review of proposals***
- ***Preparation for the 15th Conference of the Parties (CoP15)***
- ***Roundtable discussion - Improving the operation of the Scientific Authority and promoting regional collaboration***

Materials handed out in both hard and soft copy included eight training presentations from the CITES Secretariat that were translated into Arabic by ITAP and were also available in French and English (October 2009).

- ITAP conducted a national-level workshop to assist Oman in building capacity in implementing CITES and in learning more about their responsibilities under the Convention given their status as a new party. The training was delivered by a representative from the capacity-building unit of the CITES Secretariat, who was assisted by a representative from the US Fish and Wildlife Service's CITES Management Authority. Omani organizations represented included the Ministry of Environment and Climate Affairs (the designated CITES Management Authority), Customs and Police,

Ministry of Agriculture, the non-governmental organization Environment Society of Oman, and private environmental consultants. Topics covered included:

- introduction to CITES (including legislation);
- text of the Convention and important definitions;
- roles and tasks of CITES authorities;
- permitting procedures, exemptions and special procedures; and
- reading the Appendices.

Eight basic CITES training presentations from the Secretariat were translated into Arabic by ITAP and distributed to the workshop participants in both hard and soft copy. Simultaneous Arabic-English translation was provided. The Omani government identified several needed follow-up trainings to cover certain topics in greater detail, including species identification, setting quotas and making non-detriment findings, customs inspections, and participating in the CITES Conference of the Parties and technical committees (March 2009).

- ITAP conducted a regional-level workshop for CITES Management Authorities from throughout the Middle East and North Africa region. This workshop was held in Muscat, Oman immediately after the national-level workshop in order to facilitate Omani participation and build on the momentum of the first workshop. The training was delivered by a representative from the capacity-building unit of the CITES Secretariat, who was assisted by a representative from the US Fish and Wildlife Service's CITES Management Authority. Omani organizations represented included the Ministry of Environment and Climate Affairs (the designated CITES Management Authority), Customs and Police, Ministry of Agriculture, the non-governmental organization Environment Society of Oman, and private environmental consultants. Regional representatives included officials from Morocco, Algeria, Egypt, Jordan, Lebanon, Iraq, Saudi Arabia, UAE, Yemen, Qatar, and Kuwait. Non-governmental organizations were present from Lebanon and Oman. Additionally, the inclusion of two non-parties (Lebanon and Iraq) was seen as a positive indication of those countries' potential for becoming parties to CITES in the future.

The regional workshop received national-level media attention. The opening morning ceremony included remarks from the U.S. Embassy Charge d'Affaires and the Omani Ministry's Director of Biodiversity. Attendees included the Ministry's Director General of Nature Conservation and the Under Secretary for the Ministry.

Topics covered in the workshop included:

- CITES implementation and challenges faced in each country;
- CITES obligations;
- e-permitting;
- CITES and the internet;
- non-detriment findings;
- compliance;
- legal acquisition of species;
- legislation and national policy;

- public awareness;
- preparation for CoP15;
- training national CITES trainers; and
- identification of specimens.

Materials handed out in both hard and soft copy included eight training presentations from the CITES Secretariat that were translated into Arabic by ITAP, several English presentations on species identification, cd's of the Arabic language species identification manuals developed by WWF-UAE and training guides on how to use the manuals, and customs training cd's. Representatives agreed on the need for coordination among the Arab states leading up to CoP 15, particularly on proposals that the Arab states are planning to put forth for the consideration of the CoP. They expressed a desire to act as a unified block at the CoP, partly to balance the weight of other regional blocs such as the European Union (March 2009).

- ITAP Program Manager completed a two-week detail with the CITES Secretariat and developed a plan of work with the Secretariat to include a series of regional workshops to be held in 2009 and focusing on improving the functioning of existing CITES Management and Scientific Authorities (July 2008).
- A DOI-ITAP management team, along with a CITES technical expert from FWS, traveled to Jordan to develop a work plan with the Royal Society for the Conservation of Nature, which is a non-governmental organization in Jordan that houses the Management, Scientific and Enforcement Authorities. The work plan will also incorporate other regional authorities who have responsibilities for protected area management and endangered species conservation (June 2008).
- A DOI-ITAP management team, along with a CITES technical expert from FWS, traveled to Bahrain to discuss potential capacity building activities with the Bahrain Public Commission for the Protection of Marine Resources, Environment and Wildlife, which is responsible for wildlife trade issues and for issuing CITES comparable documents (June 2008).
- ITAP brought two Jordanians and one Bahraini to the United States and placed them in U.S. national parks for a two to three-month hands-on training experience in endangered species conservation. The fellows include representatives from both the governmental and non-governmental sectors (May 2008).
- Tracked status of Omani accession to CITES and worked through diplomatic channels to encourage Oman to quickly designate its Management and Scientific Authorities, as required by the Convention (April - June 2008).
- A DOI-ITAP management team, along with a CITES technical expert from FWS, traveled to Oman in April to identify areas of future technical assistance for creating and building capacity for Management and Scientific Authorities in Oman. The team developed a work plan that included a basic training on CITES to be provided in early 2009, with participants to come from the wide array of CITES stakeholder groups in Oman, particularly the Ministry of Environment and Climate Affairs, which is expected to be designated as the CITES Management Authority (April 2008).
- Interviewed candidates from Management and Scientific Authorities in the Morocco and Jordan, and the Omani Ministry which will likely become the Management Authority, for

U.S.-based intensive training and made selections of individuals for the spring (March 2008).

Develop cadre of capable inspection personnel in selected countries

- Customs officials from Jordan and Oman were represented at the regional capacity building workshop for CITES Management Authorities in Muscat. The workshop included modules on species identification at ports of entry. Additionally, participants were trained on how to use the WWF-UAE Arabic language species identification guides. These guides are widely recognized as the most thorough and comprehensive guides available in Arabic at this time (March 2009).
- DOI arranged a site visit to JFK Airport in Jamaica, NY for a delegation of Jordanian officials from the newly formed Environmental Rangers police force, the Royal Society for the Conservation of Nature (RSCN) and the Ministry of Environment. The delegation met with FWS law enforcement officers and wildlife inspectors to learn how the U.S. conducts CITES inspections at major ports of entry. The delegation was able to observe a live inspection as FWS wildlife inspectors reviewed a shipment of live soft-shell tortoises from Korea to ensure the shipment was in compliance with CITES regulations. These activities were in support of ongoing EPA and USFS efforts to develop an environmental law enforcement program in Jordan, at the request of the Ministry of Environment, RSCN and the Rangers (October 2008).
- ITAP Program Manager completed a two-week detail with the CITES Secretariat and developed a plan of work with the Secretariat to include strengthening customs capacity (July 2008).
- A DOI-ITAP management team, along with a CITES technical expert from FWS, traveled to Jordan to discuss DOI-ITAP participation in the ongoing environmental rangers program under the Jordanian Ministry of the Environment. DOI-ITAP agreed to provide CITES-specific expertise to the growing cadre of environmental law enforcement rangers (June 2008).
- A DOI-ITAP management team, along with a CITES technical expert from FWS, traveled to Oman in April to identify areas of future technical assistance for building law enforcement and permitting capacity. The basic CITES training that was proposed by this team will include sections on customs and law enforcement, with the ability to provide follow-on training sessions as desired (April 2008).
- Interviewed and selected a permitting official in Oman for U.S.-based training (March 2008).

Strengthen the ability of existing NGOs to engage in education on endangered species conservation and the management of sites containing endangered species

- ***Conservation Fellow Ashraf Al Halal (Jordan): Ashraf is an ecology researcher for Jordan's Royal Society for the Conservation of Nature (RSCN) working primarily in the Azraq wetland reserve in Northern Jordan. Ashraf spent two days at the Patuxent Wildlife Research Center to study their bird-banding and monitoring programs. He then spent six weeks in Badlands National Park working on their species management and wildlife***

restoration programs, including those dealing with bison, big-horned sheep and swift fox (September 2009).

- ***Conservation Fellow Sultan Mohammed Suliman Al-Bulushi (Oman): Sultan is a key member of the Environment Society of Oman (ESO). He traveled to the U.S. under Marine Turtle Conservation Act funding to participate in an international workshop on sea turtle populations. ITAP arranged for Sultan to spend two weeks in Bucks Island National Park to work with the sea turtle programs there and learn more advanced monitoring and survey techniques. Buck Island and Oman have many similarities in terms of their conservation challenges and priorities, and Sultan will be able to apply what he learned at Buck Island in his turtle research and conservation work for ESO (July 2009).***
- Conservation Fellow Aladdin Omar Abdullah Al- Hiyasat (Jordan): Aladdin is a flora researcher working for RSCN's research department. He was placed with the Northern Colorado Plateau Network Inventory and Monitoring Program, a multi-state program under the National Park Service that focuses on thoroughly mapping wildlife across several parks in order to provide resource managers with the information needed to adequately protect and manage sensitive species. Aladdin spent the majority of his time in the field, working on riparian vegetation surveys, monitoring aquatic microinvertebrate species, and vegetation management. (June 2009)
- ITAP adviser traveled to Oman to continue ongoing efforts towards establishing protected areas for endangered species. The adviser led a training session for protected areas rangers responsible for patrolling endangered sea turtle nesting beaches, and held a series of consultations with the Environment Society of Oman (ESO) to discuss their efforts to strengthen protected areas management. ESO, with ITAP support, continues to work closely with the government in order to draft and revise management plans for the protected areas and to build capacity and political will within the government to strengthen protected areas and endangered species management. (April 2009)
- Completed a grant to fund Friends of Earth Middle East (FOEME) in support of a species inventory in the Jordanian eco-park of Sherhabil bin Hassneh; a species inventory is a key component of park management and the completion of the survey will allow FOEME to properly manage endangered species within the eco-park (March 2009).
- ITAP team conducted a site visit to assess the progress made by ATOMM, an NGO working on conservation issues in Morocco that was provided seed money through the ITAP / MEPI program. During the visit, ATOMM finalized a work program for the funding, with activities to include:
 - design logo, distribute posters and educational materials, and launch official ATOMM website;
 - conduct beach clean-ups, likely in conjunction with Arc en Ciel (a Moroccan environmental NGO), to address the growing threat that plastic bags and other trash pose to the sea turtles;
 - interview older fishermen, who are more likely to have seen stranded or nesting turtles along the Moroccan coast in past decades;
 - host a "Caravan of Science", wherein ATOMM holds educational science workshops for school children; the caravan will be held in 17 or 18 schools along the Mediterranean coast and has already begun;
 - set up a database to store the data on sea turtle by-catch that is being reported by the fishermen; and
 - establish a network of NGOs and universities throughout Morocco that can be

tapped into to promote awareness about the sea turtles.

The work of ATOMM is being strongly supported by the local university community in northern Morocco, as well as by the U.S. Fish and Wildlife Service's Marine Turtle Conservation Act (January 2009).

- Developed a proposal with EFS for joint activities to promote endangered species conservation and CITES awareness in Bahrain (September 2008).
- Provided seed funding support to ATOM / Arc en Ciel to work on endangered species conservation and CITES awareness efforts in Morocco (August 2008).
- Selected a team of coastal protected areas experts to travel to Oman and work with ESO on revision of management plans for critical nesting sites for endangered sea turtles populations and to build capacity within ESO for protecting areas with endangered species (August 2008).
- As part of the ITAP-NPS conservation fellowship program, ITAP hosted a Bahraini NGO leader in the U.S. for an extended period to study protected areas systems development; ITAP arranged a series of meetings with NPS and FWS policy-makers and planners, NGOs, think tanks and endangered species specialists in the DC metro area to advise the NGO leader on proposing environmental legislation in Bahrain (July – August 2008).
- Conducted site visits, completed first session, and completed a program evaluation for the pilot class of the ITAP-NPS conservation fellowship program, which was composed primarily of non-governmental representatives (July – August 2008).
- A DOI-ITAP team conducted site visits to the Azraq Wetland Reserve and the Shawmari Wildlife Reserve, which are under the management of the RSCN, and began to develop a work plan that would build capacity within RSCN to manage these sites (June 2008).
- A DOI-ITAP team met with key members in Bahrain of the Environment Friends Society of Bahrain (EFS) to begin developing a work plan to support EFS in its outreach and development activities (June 2008).
- Launched the conservation fellowship program (noted above), which included fellows from the NGO sector in Bahrain and Jordan, including the head of the largest environmental NGO in Bahrain. The fellowship program provides a two-month, hands-on training experience on endangered species conservation in the U.S. National Park System, and offers the fellows the opportunity to network amongst each other and with U.S.-based NGOs in Washington, DC (May 2008).
- DOI-ITAP staff conducted a site visit to Masirah Island, a critical nesting location for endangered sea turtles that the ESO is proposing to turn into a protected area. DOI-ITAP observed and partially funded a ranger training session that was co-hosted by the ESO and engaged in a number of discussions on activities that the ESO would undertake as part of their agreement with DOI-ITAP (April 2008).
- Provided funding for FWS sea turtle expert to conduct a ranger training workshop on Masirah Island for ESO environmental rangers responsible for monitoring and protecting the turtle population and habitat (March 2008).
- Finalized formal partnership with FWS to provide technical and financial support to the Environmental Society of Oman (ESO) (January 2008).
- Began negotiations on a Scope of Work with a university partner and local NGO – Arc en Ciel -- that would focus on sea turtle management and outreach efforts in Morocco (December 2007).

- Identified the Environmental Society of Oman (ESO) as a key partner for DOI-ITAP work in Oman and began negotiations on a Scope of Work to delineate a cooperative program (December 2007). Specific activities included in the Scope of Work include:
 - Develop protected area proposal for Masirah Island -- major loggerhead nesting beach
 - Education program encouraging school children to participate in tagging and tracking local sea turtle populations
 - Series of exchanges with Jordan on public-private co-management of protected areas
 - CITES workshop to help the Ministry of Environment and Climate Affairs and the Royal Oman Police uphold their obligations under the Convention now that Oman has acceded to CITES.

Develop economic incentives for local communities to engage in endangered species conservation

- A DOI-ITAP team advised Omani stakeholders on the development of their nascent ecotourism industry. The team consulted with the Environment Society of Oman and the Ministry of Environment and Climate Affairs. The stated purpose of the trip was to assist ESO and the Ministry develop model protected areas management plans for two targeted sites (the Daymaniyat Islands and the Ras al Hadd Nature Reserves), and the team provided key recommendations on developing these sites as sustainable ecotourism destinations. A key component of the recommendations included proposals to engage the local community in these initiatives. The team also interacted with Amran, a recently created quasi-governmental agency linked to the Ministry of Tourism that is developing ecotourism resorts in the Daymaniyats and other key reserves. The team found Amran willing to incorporate elements of sustainability and responsible resource use into their overall tourism plans (February 2009).
- ITAP's conservation fellowship project hosted two MENA conservationists. Under this program, fellows are placed for a six to eight week period in a U.S. National Park where they receive advanced technical training on endangered species monitoring and management. They are exposed to a wide variety of protected areas management issues, such as protected areas law enforcement, environmental education and outreach, interpretation, visitor services and eco-tourism development. Each fellow works with local schools and community groups to encourage cross-cultural exchanges and understanding. The fellows also meet in Washington with CITES specialists to discuss CITES implementation and species trade issues in their home countries.
 - Widade Oubrou is a biological monitoring and research specialist at Souss-Massa National Park in Morocco, where she focuses on conservation of the bald ibis and several Sahelo-Saharan ungulate species. During her fellowship, she was placed in Bryce Canyon National Park where she participated in an extensive ungulate monitoring project and created a new survey protocol for the park. She also worked with the Natural History Association to conduct education programs on geology for elementary school students (October – November 2008).
 - Haitham al Aamri is a biologist with the Oryx Sanctuary in Oman, where he focuses on the oryx reintroduction project. During his fellowship, he worked in

Redwoods National Park on live capture and captive breeding techniques, in addition to participating in educational programs with local schools and community groups (October – November 2008).

- Developed a proposal with EFS for joint activities to promote endangered species conservation and develop economic incentives for conservation (September 2008).
- Selected a team of coastal protected areas experts to travel to Oman and work with ESO on revision of management plans for key ecotourism sites; these plans will include provisions for the inclusion of local communities in developing the ecotourism sector and providing incentives for species conservation (August 2008).
- Conducted meetings with the RSCN and ASEZA (Aqaba Special Economic Zone Authority) to discuss joint project to build their capacity to promote ecotourism in their protected areas (June 2008).
- DOI-ITAP staff traveled to Masirah Island and Ras al-Hadd in Oman to identify further technical assistance to develop ecotourism centered on sea turtle viewing in these sites (April 2008).

SIGNIFICANT PROBLEMS OR DELAYS

None.

MAJOR ACTIVITIES PLANNED FOR NEXT TWO REPORTING PERIODS

In the next quarter (October - December 2009), DOI-ITAP will:

Ongoing:

Continue to meet with relevant personnel in the State Department, U.S. Fish and Wildlife Service, Justice Department and the Environmental Protection Agency on this activity (Washington, DC).

October - December 2009

ITAP will work with partner NGOs to expend the remaining funds in the project, and will prepare for project completion.

ITAP will finalize a grant to the Environment Friends Society (EFS) of Bahrain to support collaborative efforts to increased awareness in Bahrain on the importance of endangered species conservation.

ADDITIONAL INFORMATION

Reports for the DOI-ITAP CITES work in the Middle East and North Africa are available upon request.

Sub-Saharan Africa

Africa • Standardized Mapping and Geospatial Database

SUMMARY OF ASSISTANCE

Ecosystem-based management, defined as a strategy for the integrated management of land, water, and living resources that promotes conservation and sustainable use in an equitable way has become a foundational element of the sustainable development paradigm. Regional conservation and development planning efforts are greatly facilitated by high quality, geographically accurate, up-to-date information about ecosystems. In order to effectively manage ecosystems, on-the-ground occurrences must be mapped so that the types and distributions of ecosystems are known. This project will address the lack of a management-appropriate, standardized classification and map of Africa's ecosystems. The products from this effort will enhance the ability to manage and conserve African terrestrial ecosystems. The approach to mapping Africa's terrestrial ecosystems in a standardized fashion builds upon prototype efforts in South America and the U.S.

This activity also addresses the charge of the Global Earth Observation System of Systems (GEOSS) task EC-06-02, to develop "a robust, standardized, and practical global ecosystem classification and map" for Africa. The intergovernmental Group on Earth Observations (GEO), of which the U.S. is a member nation and which USAID supports, is leading a worldwide effort to provide comprehensive, coordinated Earth observations from thousands of space-, water-, and ground-based instruments worldwide, transforming the data they collect into vital information for society. The resources invested in, and developed through, this project will constitute considerable financial and in-kind commitment by the partnering organizations, as mandated by the charge to members nations of GEO to support GEOSS.

FUNDING

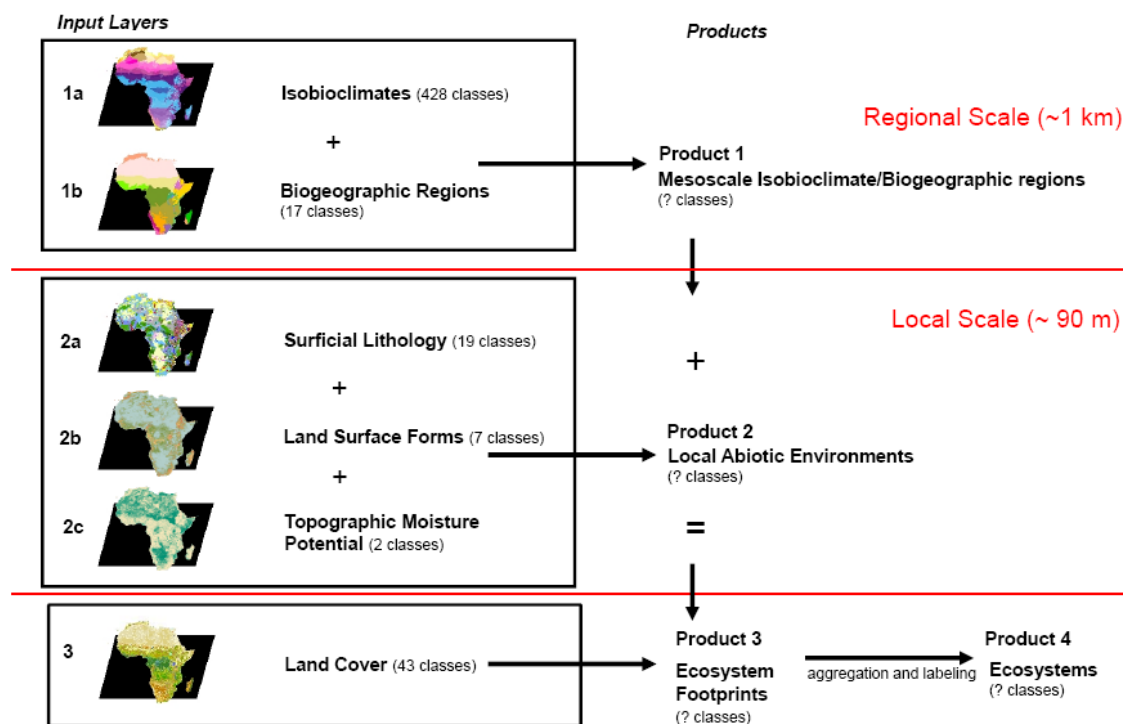
USAID, EGAT/NRM/LRM, FY 2006

RESULTS TO DATE

- *Following the September 2009 Nairobi workshop and the Kampala Africa GIS 2009 event, analysis was conducted to improve the Africa ecosystem map. Several iterations of the CART regression tree statistical mapping were implemented and a final version was completed (the map for this final version is in cartographic production). This map will be characterized in a publication which is in development and will be published in a peer review journal, possibly through the Association of American Geographers (AAG). The data used in the development of the Africa ecosystems project are available for download on the GEOSS global ecosystems website <http://rmgsc.cr.usgs.gov/ecosystems/dataviewer.shtml>.*

- A major workshop was held in Nairobi (21-24 Sep 2009) in which 23 ecosystem and vegetation scientists from across Africa and the United States developed a new, hierarchical classification of African Vegetation and Ecosystems, and provided sample locations for the new ecosystem types. The workshop was held at the Regional Center for Mapping of Resources for Development (RCMRD), a partner in the collaboration with the US Geological Survey, USAID, The Nature Conservancy, and NatureServe. The workshop and approach are described at:
http://www.servir.net/africa/index.php?option=com_content&task=view&id=560&Itemid=91
- The classification and sample data locations from the Nairobi workshop were subsequently used to develop a preliminary model of standardized ecosystems for sub-Saharan Africa. These preliminary results were then presented by the GEOSS Task Lead, Roger Sayre, in a keynote presentation at Africa GIS 2009 in Kampala, Uganda (25-30 Oct 2009). A "first model run" map of ecosystems was presented at the conference, and was received with great interest and appreciation. Post-workshop model refinement is in process. The preliminary map is attached (October 2009).
- DOI representatives, including Secretary Kempthorne, attended the Group on Earth Observation (GEO) IV Plenary and Ministerial Summit in Cape Town, South Africa. A representative from the USGS presented to the GEOSS (Global Earth Observation System of Systems) Science and Technology Committee regarding developing a partnership with CSIR, a South African mapping agency, to help with ecosystem mapping.
- The DOI representative also negotiated a cost sharing partnership with The Nature Conservancy to contract with a geospatial analyst who would process large sets of data. This contractor has previously implemented similar methodology in the South American ecosystem mapping efforts, which was a precursor and prototype for the global and the African ecosystem mapping efforts.
- DOI-ITAP hired a contractor to acquire and evaluate African lithology data. A second contractor was hired to develop African bioclimate regions, as well as to acquire, evaluate, re-classify, and integrate African landcover and lithology data. Meanwhile, the Rocky Mountain Geographic Science Center (RMGSC) is preparing a 30m continent-wide digital elevation model (DEM) that the National Geospatial Intelligence Agency (NGA) has granted special permission to use for this project. The RMGSC team is implementing a void-filling procedure to prepare the DEM for the landforms and topographic moisture potential modeling.
- All of the mapping to develop the input datasets has been completed. New maps have been developed for continent-wide: a) Ecological Divisions, b) Isobioclimates, c) Lithology, d) Landforms, e) Wetlands/Uplands, and Land Cover. These have also been spatially combined to produce the draft set of African Ecosystem Footprints. The datalayers and their combination sequence are depicted in the following graphic:

Geospatial Approach – Terrestrial Ecosystems Mapping



- USAID has provided additional funding to host a workshop in Nairobi in September 09 to assemble ecosystem experts from throughout the continent to review the mapping effort and develop an ecosystems groups classification system. The experts will also begin to relate the classification effort to the mapping resources by providing rule sets for labeling the footprints based on their attributes. Following the workshop, the rulesets will be applied to produce a draft, standardized Africa terrestrial ecosystems map, which will be presented in Kampala, Uganda, in October 09 at the Africa GIS 2009 conference.

SIGNIFICANT PROBLEMS OR DELAYS

For the September 09 Nairobi workshop, there have been difficulties in identifying the appropriate mechanism for providing funds to the African host organization.

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

Plans are in development for promotion and wider dissemination of the data to the African science community, as well as completion of the effort for Saharan and Northern Mediterranean Africa.

ADDITIONAL INFORMATION

West Africa • Oil and Gas Regulation

SUMMARY OF ASSISTANCE

The Minerals Management Service (MMS) of the Department of the Interior (DOI) is providing technical assistance and training to increase the capacity within port authorities, regulatory agencies, and other stakeholders to secure the West African Gas Pipeline. MMS, with funding from USAID, and in cooperation with the Departments of Transportation and Commerce, will contribute training modules to a series of key seminars organized by the West Africa Gas Pipeline Authority (WAGPA). The seminars aim to build the capacity of West African shipping lines, port authorities and law enforcement officials to enhance the security of key offshore assets and resources, including the West African Gas Pipeline. MMS and other U.S. Government personnel will employ a “lessons learned” approach that incorporates case study analyses of U.S. and global oil and gas pipelines in the following areas:

- Interagency and international cooperation in pipeline management
- Offshore pipeline design: prescription and standardization
- Construction standards for offshore pipelines
- Operation and maintenance of offshore pipelines: the role of operator and regulator
- Leak detection and mitigation of offshore pipelines
- Inspection of offshore pipelines
- Regulating and managing offshore pipelines
- Physical security and protection of offshore pipelines, platforms and related facilities
- Decommissioning offshore pipelines

This work supports the USAID/West Africa strategy for infrastructure (energy). The activities are part of the President’s Africa Global Competitive Initiative (AGCI), and are coordinated thorough the USAID Africa Bureau Office of Sustainable Development (AFR/SD), which is USAID’s representative to the AGCI Interagency Committee that includes others from Commerce, State, the National Security Council, and Agriculture

FUNDING

USAID funds in FY 2006. (Funds received September 2009.)

RESULTS TO DATE

West Africa Gas Pipeline Workshops: MMS conducted two West Africa Gas Pipeline Workshops in conjunction with the West Africa Gas Pipeline Company as its regulatory institutions representing the Governments’ of Ghana, Nigeria, Togo, and Benin. The English language workshop was held for the Governments of Ghana and Nigeria on September 23-24, 2009 and the French language workshop was held in Lome, Togo on September 29-30. (September, 2009)

Oil and Gas Regulatory Needs Assessment: MMS conducted an oil and gas regulatory needs assessment during their stay in Accra. MMS Representatives met with U.S. Embassy

personnel (Econ Officer, US Foreign Commercial Services Rep., and USAID Mission), including the Ambassador. MMS also held meetings with a number of different offices and agencies within the Ghanaian Government including the National Petroleum Authority, The Energy Commission, and the Ministry of Energy. (September, 2009)

SIGNIFICANT PROBLEMS OR DELAYS

None.

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

None.

ADDITIONAL INFORMATION

Reports for the DOI-ITAP work in West Africa are available upon request.

Cape Verde • Baseline Groundwater Evaluation

SUMMARY OF ASSISTANCE

The U.S. Geological Survey (USGS), a DOI agency, is working with the Millennium Challenge Corporation (MCC) to assist the Government of Cape Verde in assessing groundwater conditions in watersheds on the Islands of Fogo, Santo Antão and São Nicolau. In these three basins, MCC and Cape Verde are planning agricultural projects that require additional water resources. Future plans include the construction of wells, surface water retention structures, and groundwater recharge galleries to enhance water availability. An evaluation of current groundwater baseline conditions is needed to assess the hydrologic effects of this proposed new infrastructure. Accordingly, USGS is providing the following technical assistance:

- Applying various methods for evaluating current groundwater conditions, including water level measurements and installation of continuously recording pressure transducers in wells; groundwater discharge measurements at springs and streams; and geochemical sampling for evaluating groundwater recharge sources and travel times;
- Assisting the Cape Verdeans in the design of groundwater monitoring networks, including a determination of the type and frequency of groundwater measurements appropriate for each watershed;
- Providing training, equipment, and manuals to the Cape Verdean counterparts regarding operation of the groundwater monitoring networks;
- Analyzing historical precipitation, water level, and spring discharge data (where available) to evaluate effects of previous climate and anthropogenic influences on groundwater conditions; and
- Interpreting data from the groundwater monitoring activities in order to establish a baseline for evaluating the affects of future MCC projects.

FUNDING

Millennium Challenge Corporation in FY 2005 through FY 2008

RESULTS TO DATE

Third Mission (July 2009)

Objective: Perform a generalized monitoring and environmental assessment. Specifically the objectives included a review of the status of monitoring network as well as implementation of water quality monitoring and water resources management plans as well as status of reporting.

Outcomes and follow-up:

- ***Collection of water samples for analysis;***
- ***Mission Report to MCC on actions to take including: MCA to purchase new field equipment based on recommendation of INGRH and input from USGS; USGS to return to Cape Verde in 2010 in order to work with INGRH and local personnel***

involved in the watershed to create a detailed monitoring program, a database, and management triggers, teach the use of appropriate field equipment and develop a watershed balance model and sustainable yield together with INGRH and local interested parties; USGS to participate/lead in a local workshop to talk about sustainable water resources management and the importance of monitoring to the local population.

- *USGS report on water quality results and suggested actions by MCC and MCA*

Second Mission (November-December 2005)

During the second mission to the Cape Verde Islands, USGS experts:

- Provided additional ground-water monitoring equipment and training;
- Completed the inventorying of existing wells and springs in each of the three watersheds;
- Collected geochemical samples for evaluating sources of recharge and groundwater travel times within each watershed;
- Obtained Geographic Information System (GIS) coverages; and
- Gathered historical precipitation and groundwater data (November-December 2005).

Second Mission – Training (November-December 2005)

The following field training was provided on each of the visited islands:

- Use of GPS for establishment of new groundwater site locations;
- Procedures for groundwater inventorying of wells and springs;
- Electric tape water level measurements in wells;
- Spring and stream discharge measurements;
- Installation and operation of pressure transducers in wells; and
- Water quality sampling methods.

Second Mission – Information Exchange and Data Gathering (November-December 2005)

The team traveled to the capital city of Praia to acquire historical and ongoing precipitation, well, and spring data, in addition to detailed GIS coverage of each watershed. The team also brought additional groundwater monitoring equipment, presented preliminary findings from the previous USGS mission, and submitted the first draft of a groundwater data collection field manual. Next, the team visited each island meeting with local water users and managers; measuring water levels and installing pressure transducers in wells; quantifying stream and spring discharge; and collecting water samples for geochemical analysis.

First Mission – Establishment of Ground-water Monitoring Network (July-August 2005)

A USGS mission on the Cape Verde Islands purported to: (1) provide training on groundwater monitoring and use of monitoring equipment; (2) establish groundwater monitoring networks in each of three watersheds; and (3) inventory wells and springs in each watershed.

First Mission – Training (July-August 2005)

Training on each of the islands visited consisted of a mix of classroom lectures and field demonstrations. The topics discussed or demonstrated included:

- An overview of USGS; (classroom)
- Basic concepts in conducting a groundwater study; (classroom)
- Groundwater level monitoring; (classroom/field)
- Hand-held GPS use; (field)
- Water level measurements using steel tape, electric tape, and pressure transducer; (classroom/field)
- Water quality sampling techniques; (field)
- Age dating and recharge evaluation; and (classroom/field)
- Spring discharge measurements. (field)

First Mission – Data Gathered (July-August 2005)

The team spent time on each island meeting with local water users and managers, collecting water quality information (field parameters and samples for age-dating and isotopes), and searching for potential control basins.

General Outcomes

A wide variety of hydrologic data has been collected to better understand the current status of the aquifers in each of the three watersheds. Only a few observation wells have been inventoried, but other information has been found useful in evaluating groundwater baseline conditions, including spring and stream discharge measurements; precipitation data; geology; topography; morphology; environmental tracers (age-dating and recharge source evaluation); historic water level data; and historic discharge data from springs, tunnels and wells.

Success Story

This work provided the MCC and Cape Verdeans with the information necessary for objectively assessing the availability of current water resources, aided in the development of metrics and indicators for the evaluation of impacts of agricultural development projects in the three watersheds, and enabled the development and implementation of an integrated water resources management plan. The work directly impacted the implementation of the approximately \$110 Million MCC/MCA project in Cape Verde.

Deliverables

- **Final Report:** A first draft of the final report, “Evaluation of Groundwater Baseline Conditions in the Mosteiros, Ribeira Paul and Ribeira Fajã Basins, Republic of Cape Verde, West Africa” was submitted to MCC (April 2006). A final report for comment by MCC and MCA was submitted on June 30, 2006. The report was published in October 2006.

- List of Recommendations: A list of recommendations on water sanitation in each of the three watersheds was prepared, including options for continued monitoring and evaluation; alternative water development; and follow-up studies for meeting the needs of the planned agricultural development. The list of recommendations was provided on June 30, 2006.
- Field Manual: The final draft of the “Field Manual for Collection of Groundwater and Spring Data in the Republic of Cape Verde” was submitted to MCC (March 2006).
- Presentation of Findings: Cape Verde groundwater study findings were presented at the National Groundwater Association’s Summit 2006 meeting in San Antonio, Texas, under the working title, “Alternative Methods for Assessing Groundwater Conditions in Three Cape Verde Island Watersheds with Sparse Well Data” (April 2006).

Preliminary Findings: A workshop in Cape Verde was held that included a discussion of the findings, a final report, and recommendations for future monitoring, evaluation, and follow-up actions. The workshop also included water resources management scenarios (July 2006).

Preliminary findings were presented to MCC in May 2006. The presentation was followed by a meeting to discuss the implications of these findings for the planned agricultural projects in the three watersheds and how to develop additional methods of communicating these findings to Cape Verdeans. The findings were presented to the Cape Verdeans by televideo (June 2, 2006).

- Continued assistance of USGS/DOI to MCC: USGS/DOI, in collaboration with MCA and MCC, has developed a mechanism and budget to continue the USGS/DOI technical assistance program in Cape Verde into FY 2007. The USGS performed a technical review of MCA-CV’s “Water Resources Monitoring Plan in Paul, Faja, and Mosteiros Watersheds, Cape Verde, December 2006”. This detailed review by three USGS Hydrologists, focusing on the technical aspects of the planned ground-water monitoring and development in each of the three watersheds was completed in January 2007.

The USGS developed the following four documents for the MCC in support of developing a drilling contract for the planned production and control wells:

- Cape Verde Control Well SOW (word document)
- Cape Verde Control Well Specs (excel document)
- Cape Verde Production Well SOW (word document)
- Cape Verde Production Well Specs (excel document)

The USGS participated in several conference calls with MCC in order to provide technical insight on the development of the Water Resources Monitoring Plan and the Drilling Specifications Contract.

SIGNIFICANT PROBLEMS OR DELAYS

None

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

Providing technical assistance to the MCC as they coordinate with the MCA during the implementation of the MCA-CV's Water Monitoring Plan through informal phone conversations, email communications, and written correspondence. In addition, a final mission to Cape Verde to review the implementation of the monitoring and water resources management plan is scheduled for spring/early summer 2010.

ADDITIONAL INFORMATION

Reports detailing the results of DOI-ITAP technical assistance in Cape Verde are available upon request. The Cape Verde program under the current agreement will end September 2010.

Kenya • Natural Resource Management

SUMMARY OF ASSISTANCE

The Kenya Wildlife Service (KWS) will undertake a variety of activities with the support of USAID/Kenya's Natural Resource Management Program during the period of July 2006 - June 2010. USAID/Kenya has partnered with KWS for many years, and the activities to be undertaken will build on their joint successes in the past while gearing towards addressing strategic objectives as stipulated in the KWS' 2006-2010 corporate strategic plan and the wildlife sector assessment.

The KWS-USAID partnership has two aims: 1) to support KWS in conserving wildlife, natural ecosystems and biodiversity inside and outside its Protected Area estate and 2) to assist USAID achieve development results under its Strategic Objective 5 (SO5). Under the first aim, USAID funds will be directed to conservation efforts through the development of sound management regimes, policy and legislation for wildlife conservation. Under the second aim, KWS will direct USAID's resources towards making impacts as measured by certain indicators under the SO5 Performance Monitoring Plan.

To this end, USAID/ Kenya has asked the U.S. Department of Interior's International Technical Assistance Program (DOI-ITAP) to join this partnership to provide focused technical assistance and training on the following topics:

- Tourism infrastructure improvement;
- Environmental Management Systems certification;
- Endangered species conservation; and
- Strengthen Kenya's CITES Unit.

FUNDING

USAID – Kenya FY 2007

RESULTS TO DATE

- Environmental Management Systems: A DOI-ITAP team traveled to Kenya to meet with USAID - Kenya, the Kenyan Government (Kenyan Wildlife Service, KWS), and its partners to advise them on what constitutes an Environmental Management System (EMS) program at the park level and at a national park system level. Following their evaluation of the three pilot parks, the team drafted a one-year workplan of potential DOI-ITAP activities to meet Kenya's EMS goals (December 2007).
- Park Infrastructure (entrance gates, trails, campgrounds): A DOI-ITAP team traveled to Kenya to recommend how KWS can improve select interpretive trails, campgrounds, and the park entrance gates at two KWS high priority parks. The DOI-ITAP team worked with their KWS counterparts in generating a list of recommendations and next steps toward this effort (October 2007).

SIGNIFICANT PROBLEMS OR DELAYS

The political instability and outbreak of violence in Kenya following the December 2007 Presidential Elections put this project on hold since then. It appears that the situation is settling down and USAID/Kenya and KWS have reported that they will be ready for further DOI-ITAP's assistance in 2009.

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

None

ADDITIONAL INFORMATION

Reports detailing the results of DOI-ITAP technical assistance in Kenya are available upon request.

Mozambique • Tourism Development

SUMMARY OF ASSISTANCE

DOI-ITAP is working with Nathan Associates and USAID/Mozambique to support the development of natural and cultural resource-based tourism opportunities in Northern Mozambique.

FUNDING

USAID/Mozambique in FY 2007

RESULTS TO DATE

- A DOI-ITAP team engaged in an assessment of research and development activities in and around Pemba Bay, a major historic and cultural resource of Northern Mozambique. Pemba Bay is a complex ecosystem that provides habitat for a variety of aquatic life. The team identified gaps in the research, and provided recommendations for further studies. They assessed the multiple uses of the Bay, including tourism and recreational uses, and provided recommendations for taking an integrated approach to Bay development. The team also provided recommendations on steps needed to protect the Bay. They also developed recommendations for further DOI-ITAP technical assistance at the site. Finally, the team delivered baseline natural resource datasets for Pemba Bay (October 2006).
- A GIS specialist is identifying baseline natural resource datasets for Pemba Bay. Information is being gathered for terrestrial and marine areas of the Bay and its watershed and will include GIS datasets, databases, models, reports, and imagery.

SIGNIFICANT PROBLEMS OR DELAYS

No new requests for technical assistance have been received.

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

None

ADDITIONAL INFORMATION

Reports describing the results of DOI-ITAP technical assistance in the Mozambique are available upon request.

Mozambique • Water and Sanitation

SUMMARY OF ASSISTANCE

The U.S. Geological Survey (USGS) is working with the Millennium Challenge Corporation (MCC) to conduct implementation planning on the Mozambique Compact proposal for \$650 million over five years to increase the productive capacity and improve the investment climate in the four northern provinces of Mozambique – Cabo Delgado, Niassa, Nampula and Zambezia – the poorest regions of the country. The proposal focuses on water and sanitation and private sector development. Specific projects include water and sanitation, roads, improved land administration, a private credit bureau, agribusiness development, alternative dispute resolution mechanisms, cross-cutting policy reforms, and capacity building initiatives.

The Water and Sanitation Project of the Mozambique Compact proposal includes the following activities:

- **Urban Water Supply:** rehabilitation and expansion of potable water supply systems in three capital cities, seven municipalities, and 16 towns and villages. Sustainable utilization of surface-water and ground-water resources will also be explored.
- **Rural Water Points:** construction/drilling of up to 500 water holes and/or boreholes in Cabo Delgado Province and 1,000 in the Province of Nampula.
- **Nacala Dam:** rehabilitation of the 21-meter high Nacala Dam and augmentation of its reservoir. Environmental and surface water flow studies will be carried to inform design and scope of project.
- **Sanitation Services:** rehabilitation and expansion of sanitation services in three capital cities and five other municipalities located in Cabo Delgado, Nampula and Zambézia.

The USGS serves as a scientific advisor to MCC during Due Diligence and Implementation Planning for the Mozambique Compact. In this role, USGS is involved in the review, validation, and/or verification of scientific/technical documents and data related to surface- and ground-water resources as developed by the Government of Mozambique and/or MCC and their respective consultants/contractors. This includes (but is not limited to) the following:

- Terms of Reference for and results from various Environmental Impact Assessments, Environmental Flow Requirement Studies, Surface Water Capacity Assessments, and other water-related environmental studies carried out by the Government of Mozambique, as required by MCC.
- Scientific data and interpretations that serve as a basis for improving access to water while ensuring sustainability of water resources.
- Proposed monitoring indicators, triggers, water budgets, sustainable yields, and water quality standards related to water resources assessment/sustainable management.
- Water resource management plans and water quality/quantity monitoring activities.
- Scientific data and interpretations pertaining to the raising of the Nacala Dam and expansion of the associated reservoir.
- Proposed location, design, and installation of water systems and rural water points.

- Review of implementing entities' capacity to use water quality/quantity monitoring data for sustainable water resources management and provision of safe drinking water.

FUNDING

MCC in FY 2007 and FY 2008

RESULTS TO DATE

None

SIGNIFICANT PROBLEMS OR DELAYS

None

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

Review of Technical of Reference Documents and mission to Mozambique summer 2009.

ADDITIONAL INFORMATION

Reports describing the results of DOI-ITAP technical assistance in the Mozambique are available upon request.

Tanzania • Protected Area Management

SUMMARY OF ASSISTANCE

Since 1997, DOI-ITAP has partnered with USAID/Tanzania to deliver a broad range of technical assistance programs to the Government of Tanzania (GOT). This partnership's objective is to improve natural resources management in Tanzania's protected areas. Under this program, DOI-ITAP has provided technical assistance and training on a wide array of protected area management and operational topics in diverse landscapes, including national parks, marine protected areas, and game reserves. All DOI-ITAP activities have been conducted in close collaboration and cooperation with various GOT agencies as well as leading non-governmental organizations.

FUNDING

USAID/Tanzania in FY 2008
 USAID/Tanzania in FY 2006
 USAID/Tanzania in FY 2004
 USAID/Tanzania in FY 2003
 USAID/Tanzania in FY 2001
 USAID/Tanzania in FY 1998
 USAID/Tanzania in FY 1997

RESULTS TO DATE

Anti-Poaching (Law Enforcement)

- DOI-ITAP worked with Booz/Allen/Hamilton (a USAID consultant) to identify potential team members for a project that would evaluate Tanzania's hunting concessions program (Summer 2009).
- Law Enforcement Needs Assessment of Tarangire-Manyara Landscape: A DOI-ITAP team conducted a multi-sector law enforcement needs assessment of the various land management entities, both governmental and non-governmental within this landscape. DOI identified potential operations coordination and collaboration strategies, equipment needs, and assisted with drafting a proposal by the African Wildlife Foundation for LE funds (March 2007).

Success Story

As part of the March 2007 law enforcement trip, a DOI-ITAP team worked with its in-country strategic partners to build alliances for the anti-poaching and conservation initiatives. The high level of coordination between the DOI-ITAP team, the USAID mission, and their partners resulted in the completion of a highly collaborative law enforcement needs assessment with the buy-in of the critical Tanzanian and USG partners and facilitated further cooperation on this issue in the future.

- Village Game Scouts Law Enforcement Training: In an effort to strengthen the management of Tanzania's protected areas and wildlife, DOI-ITAP provided the tuition for 30 local village game scouts to attend a government certified natural resource law enforcement training program. Through this training, the 30 village game scouts received uniforms, boots, and basic tools (September 2005).
- Ugalla Game Reserve Assessment of Previous LE Training and Radio System Installed; Basic Equipment Delivery at Ugalla Game Reserve; and Initial Assessment of the LE Capabilities of two Wildlife Management Areas: Two DOI-ITAP law enforcement experts conducted a natural resource law enforcement assessment of the locally governed Uyumu and Ipole Wildlife Management Areas (WMAs) surrounding the Ugalla Game Reserve. The assessment results will be used to develop a workplan and curriculum for future law enforcement technical assistance. The DOI-ITAP team evaluated the effectiveness of its previous law enforcement training at the Reserve as well as delivered \$2,150 worth of equipment (binoculars, mosquito netting, and GPS units) (September 2005).
- Marine LE Training of Local Community Scouts and Patrol Boat Delivery: A team of four DOI-ITAP law enforcement agents trained a team of Bagamoyo district-level coastal scouts in basic marine law enforcement techniques and small-boat operation, maintenance, and safety. In addition to the training, ITAP purchased and delivered a 14-foot fiberglass patrol boat, a motor, and boat accessories to the district for use in near-shore law enforcement patrolling and response in the surrounding marine protected areas. The District Commissioner of Bagamoyo and the Member of Parliament for Bagamoyo were highly impressed with the DOI-ITAP trainers and the results of the training course. The Acting Ambassador and the USAID Mission Director presided over the boat transfer and graduation ceremony and were very pleased with the results of the training.
- The Tanzanian press favorably covered the graduation ceremony (February 2004). LE Training of Marine Protected Area Staff: Three DOI-ITAP staff provided a two week law enforcement training to multi-jurisdictional marine protected areas staff in Dar Es Salaam, Tanzania, the first of its kind. USAID/Tanzania and its partners indicated that this is the start of a long term protection program for Tanzania's Coastal Resources (June 2003). Ugalla Law Enforcement Training: Five DOI-ITAP law enforcement experts trained 35 Tanzanian Wildlife Division game scouts in anti-poaching techniques, case preparation, personal safety and emergency response, use of compasses and GPS units, and other topics using a combination of class work and field exercises. This effort, the first major training event provided strictly to the Wildlife Division, was completed at the Ugalla Game Reserve, a Wildlife Division managed protected area in the central region of the country (September/October 2002).

Success Story

As part of the December 2003 marine law enforcement training, the DOI trainers and Tanzanian trainees conducted surprise inspections of local seashell dealers and seized over 150 kilos of illegal sea coral and parts of 5 sea turtles. Local media reported the operation was the largest seizure of illegal marine products in Tanzanian history.

- Tarangire and Lake Manyara National Parks: DOI-ITAP law enforcement experts provided a series of law enforcement training sessions at Tarangire and Lake Manyara National Parks. The topics included investigation and arrest methods, land navigation using compass and GPS, incident report writing, and basic patrol design. DOI-ITAP teams helped design standardized reporting forms for anti-poaching teams. Each successive training course built upon the results and findings of previous training (October 1998, February 1999, February 2000, March 2002).
- Anti-Poaching Equipment: DOI-ITAP has donated approximately \$60,000 in law-enforcement related equipment to rangers in Tarangire and Lake Manyara National Parks and the Ugalla Game Reserve. The equipment has included camping gear, binoculars, compasses, maps, and GPS units. DOI-ITAP teams assess the use and maintenance of the equipment during repeat visits to the sites.

Communications Systems

- Ugalla Game Reserve Radio System: A DOI-ITAP radio expert delivered and installed a high frequency radio communication system to the Wildlife Division (WD) of the Ministry of Natural Resources and Tourism at the Ugalla Game Reserve. This communication system will enable the Wildlife Division rangers to conduct foot and vehicle patrols and search and rescue operations in and around the Reserve. The donated system consisted of two Vertex Standard base station radios, four high frequency (HF) Vertex Standard mobile radios, and twelve very high frequency (VHF) ICOM portable radios, total value \$25,000. The DOI-ITAP radio expert also trained key WD staff on the use and maintenance of the radios (January 2005).
- Radio Communication System Assessment: A DOI-ITAP radio expert conducted an extensive assessment at the Reserve to determine the best radio system to purchase and install. This will be the first system of its kind to exist and will enable Ugalla staff to communicate with other government agencies, including the Tanzania National Park Authority (TANAPA), for improved collaboration (February 2004).

Roads

- Training: A DOI-ITAP team worked with TANAPA road staff to complete the design and construction of a new access road and parking lot to newly constructed visitor centers at both Tarangire and Lake Manyara National Parks. The DOI-ITAP team combined this task with

on-the-job training for park staff, emphasizing the environmental impact component of these tasks. The DOI-ITAP team also provided the park staff with inexpensive surveying equipment that was formerly unavailable, thus significantly improving their construction capabilities (June 2003).

- Training: A series of DOI-ITAP teams trained TANAPA staff on road construction and repair, as well as the operation and maintenance of roads equipment. Skills training focused on grading, crowning of roads, establishment of shoulders, sensitivity to water passage, and use of equipment in different soil types. Through field exercises, critical sections of the roads in Tarangire National Park have been repaired (February/March 1998, June 2000, January 2001, February/March 2002).
- Assessments of Road Conditions: A DOI-ITAP team performed an assessment of the road program in Serengeti National Park and provided recommendations for improvement (February/March 2002).
- Environmental Assessment: A DOI-ITAP roads engineer participated with a team of USAID contractors and specialists in drafting a programmatic environmental assessment of proposed roads projects in Tarangire and Lake Manyara National Parks. The DOI-ITAP engineer worked intensively for one month with a team of experts and produced a draft project environmental assessment for review by USAID and the Tanzanian government in early March (February 2000).
- Road Assessment: The road conditions at Tarangire National Park were comprehensively assessed in light of damage due to heavy rains (February/March 1998).

Fire

- Fire Management Planning: A team of DOI-ITAP fire management experts worked with TANAPA staff to produce a fire management plan for Tarangire National Park (October 1999, March 2002).

Success Story

A DOI fire management team worked with TANAPA management specialists to draft the first Fire Management Plan for Tarangire National Park. TANAPA has indicated to DOI that this plan has been incorporated into the General Management Plan for both Tarangire and Lake Manyara National Parks.

- Training: Based on DOI-ITAP's assessment of the capacity of Tarangire and Lake Manyara National Parks to suppress wildfires and manage fire in the Parks for ecological objectives, multi-bureau DOI-ITAP fire management teams have conducted training in fire suppression skills for the parks' staff. DOI-ITAP contributed basic fire fighting tools to the parks, and the training sessions incorporated both lecture and field exercise components to build

capacity in the parks both to fight wildfires and to manage controlled burns (January 1999, September 1999, March 2002).

Park Infrastructure

- Park Infrastructure Planning at Gombe National Park: A DOI-ITAP team, on behalf of USAID and the Jane Goodall Institute, traveled to the Gombe National Park to work with the area management staff and the local communities to evaluate and provide recommendations for the improvement of the park's facilities and infrastructure, visitor center, trail management, and tourism potential. (April 2009)
- Park Infrastructure Planning at Ngorongoro and Ugalla: A DOI-ITAP team traveled to the Ngorongoro Conservation Area and another team traveled to the Ugalla Game Reserve to work with the area management staff, the NGOs, and the local communities to evaluate and provide recommendations for the improvement of each protected area's infrastructure, visitor education/interpretation, and visitor management (Aug 2008).
- Signs: DOI-ITAP provided Tarangire and Lake Manyara National Parks technical assistance on the design and development of park signage (October 2003).
- Facility Design Assistance: A design for the Lake Manyara visitor center was developed (July/August 1999).

Park Interpretation and Education

- Park Infrastructure Planning at Ngorongoro and Ugalla: A DOI-ITAP team traveled to the Ngorongoro Conservation Area and another team traveled to the Ugalla Game Reserve to work with the area management staff, the NGOs, and the local communities to evaluate and provide recommendations for the improvement of each protected area's infrastructure, visitor education/interpretation, and visitor management (Aug 2008).
- Interpretation and Infrastructure Review: As part of another trip to East Africa, a DOI-ITAP team traveled to Tanzania for a two-day review of its previous interpretive training to meet with Tanzanian partners and define next steps for select Tanzanian parks (November 2007).
- Visitor Services: A DOI-ITAP team conducted a two week course on visitor services and interpretive guide training at Lake Manyara and Tarangire National Parks. The DOI-ITAP team trained eight Tanzanian park staff from four national parks and two AWF staff members in a number of interpretive principles and techniques, including: core concepts of interpretation; fundamentals of interpretive planning; developing theme statements; understanding the learning styles of a variety of audiences; roving interpretation; brochure development; visitor center operation and management; interpretive guide training for guided walks; and environmental education (March 2005).
- Interpretation Workshop: A DOI-ITAP team consisting of an architect, landscape architect, and an interpretive specialist worked with TANAPA in an AWF-sponsored workshop on

designs for visitor services in Tarangire and Lake Manyara National Parks. The workshop's focus was establishing criteria for approving design concepts for a new visitor center, signage in the parks, and other park infrastructure ideas needed to improve the park experience for visitors (July/August 1999).

General Protected Area Management

Study Tour to Four DOI Sites: At USAID/Tanzania's request and with full funding from the GOT, DOI-ITAP led three Tanzanian Park Superintendents and the Ecology Chief for the Tanzania government on a two week study tour to three U.S. national parks and one national wildlife refuge: Lava Beds National Monument, Yellowstone, and Sequoia-Kings Canyon National Parks, and Tulelake National Wildlife Refuge. The Tanzanians learned about how the U.S. addresses a variety of challenges and overall visitor management (September 2003).

- Marine Protected Area Management: DOI-ITAP completed a one week evaluation of the marine resources at select Marine Protected Areas (MPAs) near Dar Es Salaam during June 2003. Based on needs and interest expressed, DOI-ITAP recommends that the Tanzanian government adopt an embedment anchor buoy system technology to install replacement demarcation buoys at Mafia Island while conducting an on-the-job training for various Marine Protected Area staff. Another major recommendation is for the GOT to increase its efforts to eliminate drag net fishing, which is destructive to coral reefs (June 2003).
- Marine Protected Area Training: A multi-agency group of Tanzanians associated with Tanzanian marine protected areas participated in a study tour in the U.S. and were trained in marine protected area management. The participants included officials from the newly formed Mafia Island marine reserve, the Bureau of Fisheries, and the University of Dar Es Salaam. They were introduced to a variety of marine protected area management issues and practices, including visitor services; conservation program management; budgeting; law enforcement; and facilities management. Participants were encouraged to discuss links where practices in the U.S. could be adopted for Tanzanian programs (July/August 1999).
- Park Management: A group of Tanzanian resource managers, including the Chief Park Wardens of Tarangire and Lake Manyara National Parks, participated in a U.S. study tour designed to highlight management approaches in relevant ecosystems (October 1998).

Program Management

- A DOI-ITAP Senior Advisor (a member of the 2009 Gombe NP Infrastructure and Tourism Team) met with USAID and various in-country partners in Dar es Salaam to discuss future projects (April 2009).
- DOI-ITAP participated in USAID's SOT Annual Retreat in Leshoso, Tanzania and presented a summary overview of DOI's program of assistance in Tanzania (November 2008).

- DOI-ITAP worked with a USAID/Tanzania environmental officer to discuss next steps for the DOI program in Tanzania and to orient and brief two DOI Park Planning teams who were scheduled to conduct assessments in Tanzania (June 2008).
- DOI-ITAP met with the Tanzanian Director of the Wildlife Division (WD) and DOI's U.S Fish and Wildlife Service in Washington, DC to discuss WD's priority needs and how to most effectively utilize the available DOI-ITAP technical assistance (December 2007).
- DOI-ITAP participated in USAID's Natural Resources Management/Economic Growth Program Integration Workshop in Bagamoyo. The planning retreat provided a forum to offer input on USAID/Tanzania's plans for merging and integrating its Natural Resources Management (NRM) and Economic Growth (EG) programs and provided feedback on the future direction of DOI's activities with these programs (May 2007).
- DOI-ITAP provided USAID/Tanzania a workplan, in coordination with its partners, for new funds expected in FY 2007 (February 2007).
- DOI-ITAP attended the USAID SOT Annual Retreat in Bagamoyo, Tanzania, as an opportunity to meet with in-country partners to decide on next collaborative activities (March 2006).

SIGNIFICANT PROBLEMS OR DELAYS

None.

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

Planning is underway for village game scout/ ranger training in law enforcement skills. Efforts will include a "train the trainers" session in the Ugalla Wildlife Management Area. Field equipment will be delivered.

As assessment of the operational status of the field radio communication system for the Ugalla Wildlife Management Area is being planned. Actions will include evaluating the current system, providing additional equipment as needed, and delivering basic training in the maintenance of such equipment.

Planning is underway for follow-on implementation of recommendations made for Gombe National Park and the Greater Gombe Ecosystem. The Jane Goodall Institute is currently developing draft SOWs, for DOI-ITAP review, regarding proposed follow-up activities.

ADDITIONAL INFORMATION

Reports describing the results of DOI-ITAP technical assistance in Tanzania are available upon request.

Asia & the Pacific

Mongolia • Water Supply

SUMMARY OF ASSISTANCE

The U.S. Geological Survey (USGS)/DOI is working with the Millennium Challenge Corporation (MCC) to conduct due diligence on the proposed Mongolia Compact proposal that would provide approximately \$200 million in grant funding to support economic growth and poverty reduction throughout the country. The Mongolia Compact proposal includes a Land and Property Rights Project that is projected to cost approximately \$25 million. The objective of the proposal is to promote development of farming-based community settlements with adequate infrastructure in peri-urban areas to create jobs and adequate living conditions for rural in-migrants to prevent uncontrolled sprawling of suburban ger (portable housing used by nomads in Mongolia) areas and further land degradation. MCC funding will be used for undertaking land tenure reform, capacity building for local government offices and households to effectively utilize peri-urban land, and improving water supply in peri-urban areas. Addressing land tenure, capacity building, and water supply will remove key constraints in improving farming technologies and stimulate development farming-based settlements with basic infrastructure such as renewable energy sources and simple environmentally friendly waste removal.

FUNDING

Funding from the Millennium Challenge Corporation started in FY 2007

RESULTS TO DATE

The USGS was tasked with reviewing the environmental issues of the Land and Property Rights Project for the Mongolia Millennium Challenge Account (MCA) proposal. Special emphasis was placed on evaluating the effects of the construction of new wells and/or the rehabilitation of old wells on the environment and the inhabitants of the surrounding areas. As part of this task, the USGS reviewed available geohydrologic information in the project area prior to conducting a site visit. The review consisted of summarizing the geohydrology of the project area in the Selenge River Basin, documenting available geohydrologic data, and reviewing existing relevant laws, regulations, and procedures that pertain to the project. The review delineated data gaps that, if filled, would help evaluate the effect of the project on the environment and the local inhabitants. A site visit was completed in Mongolia during May 7–18, 2007, to complete final due diligence on environmental and social issues arising from the Mongolia MCA proposal.

During the mission, the team interviewed specialists, administrators, academics, and local residents to obtain information and perspectives on the proposed project. The team participated in fieldtrips of the Ulaanbaatar, Darkhan and Erdenet peri-urban areas. The team prepared a report that updates and refines the geohydrologic data collected as part of the pre-trip report with data collected during the site visit. In addition, relevant laws, regulations, and procedures that pertain to the project have been reviewed and updated. Data gaps that remain after the site visit are delineated and the source and estimated costs of filling these data gaps are presented.

Finally, the answers to the environmental and social assessment due diligence questions pertaining to water resources are discussed.

Summary of Major Findings and Recommendations

In order to evaluate the environmental issues of the Land and Property Rights Project for the Mongolia MCA proposal, the geohydrology of the Selenge River Basin was reviewed and summarized. Major findings of the geohydrology review are:

- The annual precipitation ranges from 250-400 mm per year. On the average, 70 to 90 percent of the precipitation is lost to evapotranspiration. About six percent of the average annual precipitation becomes recharge.
- Major development of grassland soil into intensive cultivation for grains and other crops would likely result in severe wind erosion and substantial degradation of the soils because of the light character of the soils.
- Most of the streamflow in the basin is the result of rainfall runoff, with most of the runoff occurring in the summer months. The Selenge River Basin is prone to floods during heavy rainfall events in the summer.
- Ground-water resources comprise 80 percent of the annual water supply in Mongolia and 91 percent of annual water supply for domestic and municipal use.
- Three major hydrogeological units or aquifers have been identified in the Selenge River Basin: (1) intergranular or alluvial aquifers; (2) fissured limestone aquifers; and (3) bedrock aquifers. Most ground water used for municipal, industrial, and irrigation supply is obtained from the highly productive alluvial stream-channel aquifers.
- The bedrock aquifer is divided into rocks with limited ground-water resources and rocks with essentially no ground-water resources. Wells drilled in areas mapped as bedrock aquifers with limited ground-water resources have a relatively high probability of yielding sufficient water for domestic supply. Areas mapped as containing essentially no ground-water resources would require additional geohydrologic investigation to determine the potential for obtaining sufficient water for domestic supply if wells were to be drilled in these areas.
- The depth of water in the bedrock aquifer is variable, generally increasing in depth away from the topographic low points along the stream channels that drain the basin.
- Most wells located in pasturelands in the highlands area of the Selenge River Basin are hand-dug wells in shallow alluvial deposits. The shallow aquifer is susceptible to periods of drought due to the limited recharge area and storage capacity of the aquifer.
- The lack of pastureland wells has created overgrazing conditions in the pastureland surrounding operating wells. The Ministry of Food and Agriculture initiated a program in 2004 to drill new pastureland wells and rehabilitate destroyed wells to relieve the overgrazing problem. The average cost of drilling a 50 meter new well is \$8,000 and the average cost of rehabilitating a destroyed well is \$3,000.
- Many rural wells do not have proper sanitary seals, allowing untreated human waste and animal manures to contaminate the wells. Shallow, hand-dug wells, are especially vulnerable to contamination from human and animal waste.

Relevant laws, regulations, and procedures that pertain to the environmental issues of the Land and Property Rights Project were reviewed. Major findings of the review are:

- The Mongolian government has established 40 protected areas in Mongolia where it is prohibited to construct buildings or disturb the land, vegetation, or water resources.
- The Water Law that was adapted in 1995 and was amended in 2004 integrates river basin management practices with the goal of better utilizing water resources while protecting ecosystems.
- The Water Authority was mandated by the 2004 amended Water Law to inventory all the wells in Mongolia and develop a database.
- The Water Law requires that individuals submit a request to drill a well to the soum or aimag governor but are not required to complete an environmental assessment of the water use.
- The Water Law requires that individuals or organizations using water for industrial purposes submit an application for water utilization to the soum or aimag governor that includes an environmental assessment of the water use.
- The Water Law requires a 100 m sanitary zone surrounding municipal or centralized supply wells.

Major data gaps identified in the review include the following:

- Historical well construction, water-level, and water-quality data need to be compiled and evaluated for the project area. These data are needed to help evaluate the water availability and potential environmental impacts of the Property Rights Project.
- The depth to water and water-bearing properties of the bedrock aquifer was not determined during this review. Because most of the potential leaseholds overly the bedrock aquifer, there is a need to gather existing geohydrologic information on the bedrock aquifer.
- Ground-water level and water-quality monitoring networks have not been established for the pastureland areas.

Major recommendations resulting from this review include:

- Deep wells should be constructed in the alluvial and bedrock aquifers instead of shallow wells in the perched alluvial aquifer.
- The Property Rights Project should increase the funds allocated to leaseholders for building infrastructure. Interviews with multiple agencies indicate that average drilling costs for deep wells (50 m and deeper) are significantly higher than the \$5,000 allocated for building infrastructure (wells, fences, buildings, etc.) for this project. Because of the expense of constructing deep wells, potential leaseholders may rely on less expensive shallow wells. If only shallow wells were constructed for the project, then all wells would be constructed where there is a shallow depth to water. This would not provide a water supply in all areas of the pastureland, which could result in overgrazing. Also, the reliance on shallow wells would result in the project being susceptible to droughts, which could limit the sustainability of the project.

- The Property Rights Project should consider contracting the Geoecology Institute or other professional geohydrologists to complete detailed geohydrologic investigations of the bedrock aquifers in Ulaanbaatar, Darkhan and Erdenet. The geohydrologic investigation should include details on the geology, water-bearing units, available well data, and delineate areas not suitable for well construction.
- Geophysical techniques, such as vertical electric soundings, should be utilized to locate wells in bedrock aquifers.
- The project should encourage the construction of deep wells with six meter sanitary seals to reduce the possibility of surface contamination from human and animal waste. Deep wells are more expensive than shallow wells, but they are less susceptible to droughts and more protected from sources of surface contamination.
- A sanitary zone should be established around wells constructed for the Property Rights Project to help protect the quality of ground-water resources. Wells should be at least 30m from septic leach fields, 30m from animal or fowl enclosures, and 45m from a seepage pit or latrine. In addition, wells should be located upgradient from known sources of contamination and the top of the casing should be above the grade of known conditions of flooding by drainage or runoff from the surrounding land.
- Information on proper waste management and well-head protection should be provided to potential leaseholders.
- Courses or seminars should be offered on well maintenance and repair.
- Ground-water level and water-quality monitoring networks should be established to effectively monitor the environmental impacts of the Property Rights Project.
- A comprehensive Geographic Information System (GIS) database should be developed to help evaluate, manage, and monitor the Property Rights Project.

Success Story

This work provided the MCC with the information necessary for objectively assessing the costs of constructing new deep wells in the alluvial and bedrock aquifers within the project area. The GIS developed for this project provided the framework for MCC/MCA to develop a comprehensive GIS to help evaluate, manage, and monitor the Property Rights Project.

SIGNIFICANT PROBLEMS OR DELAYS

None

MAJOR ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

None

ADDITIONAL INFORMATION

Reports describing the results of DOI-ITAP technical assistance in Mongolia are available upon request.

Philippines • Environmental Law Enforcement

SUMMARY OF ASSISTANCE

DOI-ITAP is providing technical assistance and training to increase the capacity of local and national environmental law enforcement bodies, policies, and operations in the Philippines. This work builds on previous law enforcement training conducted by DOI-ITAP in the Philippines. It supports the U.S.AID/Philippines goal of strengthening national and local government units and communities to address these critical threats to the country's coastal and terrestrial resources and promote good governance, transparent and accountable, in enforcing environmental laws.

FUNDING

U.S.AID/Philippines in FY 2006

U.S.AID/Philippines in FY 2005

U.S.AID/Philippines in FY 2004

EAPEI in FY 1999

RESULTS TO DATE

All efforts undertaken by DOI-ITAP in the Philippines are done in close collaboration and coordination agencies of the Government of the Republic of the Philippines (GRP), leading environmental non-governmental organizations, as well as attorneys from the private sector.

Forums, summits, and conferences. DOI-ITAP has played a vital role in facilitating, co-organizing, and sponsoring environmental forums, summits, and conferences with national significance. These include:

- ***U.S. Embassy Lecture. On December 10, 2009 DOI-ITAP gave an hour-long lecture on the programs and accomplishments of U.S.AID/ DOI-ITAP in providing technical assistance to GRP on Environmental Law Enforcement. The lecture took place at the U.S. Embassy in Manila. This lecture was attended by heads of various departments of the U.S. Embassy and the OEE team of U.S.AID. In addition to the program accomplishments, we also presented the status of development and saleint features of the "Green Courts". (December 2009)***
- ***Joint AMCHAM and CANCHAM Meeting on Environmental Courts. On December 9, 2009, at the request of The American Chamber of Commerce of the Philippines and the Canadian Commerce of the Philippines, DOI-ITAP made a presentation on the "Special Environmental Judicial Courts (Green Courts) in the Philippines during the joint AmCham-CanCham EQM Committee briefing at the American Chamber Hall in Makati City. Present during the meeting were AmCham Chairman, Mr. Raymond Cunningham and Mr. Felino Palafox, American Chamber Executive Director, Mr. Robert Sears, American Chamber ICIP Executive Director, Mr. John Forbes, Canadian Chamber Marketing Events Manager, Ms. Grace Ventosa. Also in attendance were U.S. Embassy Environment Science and Technology and Energy***

Officer, Dr. Dovas A. Saulys, U.S. Embassy EST Health Specialist, Ms. Maria Theresa Villa and U.S.AID OEE Staff Ms. Roopa Kari and Mr. Oliver Agoncillo. AMCHAM-CANCHAM members and partners from Makilala Mining Company, Inc., Mobiclear, PSA Group, Q2 HR Solutions, Quisimbing-Torres and Associates, RW Burne Associates, Philippine Export Confederation, MRL Gold Philippines and Quezon Power Philippines among others were also present during the briefing.

DOI-ITAP briefed the members on the rich biodiversity of the Philippines and the major threats besetting its critical and abundant resources. The presentation was followed by the various efforts being undertaken on behalf of the Government of the Philippines to address these threats. Highlights of the presentation included the creation of the Special Environmental (Green Courts) in the Philippines and the process of drafting the Special Rules on Adjudication of Environmental Cases. DOI-ITAP discussed the novel provisions of the said rules including the Writ of Kalikasan (Writ of Nature) that caught the attention of various chambers present in the country. During the Open Forum, clarifications were made regarding the provisions of who can file or initiate cases, injunctions and authorities in the exercise of permits and licenses for legal investors, assurances for investors on consistency of rules and provisions to protect compliant investors from harassments and the like. The AmCham members were encouraged by the fact that the Rules, particularly the provision on Writ of Kalikasan are still being finalized. The DOI-ITAP representative, who also sits as a member of the Committee finalizing the draft also explained that the Supreme Court seeks to balance the various interest relating to conservation vis-à-vis legal investments aiming to come up with a law that will help all sectors including the investors in valuable and sustainable use of natural resources.

The briefing ended with a closing remark from Mr. Rey Cunningham, expressing his appreciation to DOI-ITAP for an informative and interesting discussion. He said that the members of the AMCHAM-CANCHAM find it re-assuring to know that efforts are being undertaken to develop a consistent and coherent body of laws and courts that are technically adept to hear these complicated issues on Environmental Laws. (December 2009)

- Badge Bar and Bench Conference.** The Badge Bar and Bench Conference for the Province of La Union: In partnership with Tanggol Kalikasan, a local NGO, DOI assisted the Province of La Union and the Coastal Resources Management Regional Technical Working Group (CRMR-TWG) in the preparation and conduct of the Badge Bar and Bench Conference for the Province of La Union. A representative from DOI helped in the development of the conference concept and design, conducted orientation and training for the conference's facilitators and documenters, and participated in the conference itself as the facilitator and technical expert on environmental law enforcement. Discussions resulted in substantive recommendations for moving forward and the conference had strong attendance and full participation of individuals from the target sectors. The Badge was represented in the conference by members of the Philippine National Police, Coast Guard and Philippine Navy; and the Bar was represented by Private Lawyers, City Prosecutors, and Provincial and Regional State Prosecutors. Several Municipal and

Regional Court Judges and the Chief of the Philippine National Police, Jesus A. Versoza, Regional State Prosecutor Nonatus Rojas, Provincial Governor Manuel Ortega, and Congressman Victor Ortega also attended. (September 2009)

- **Forum on Environmental Justice:** DOI-ITAP assisted the Philippine Supreme Court by covering several costs of the Forum on Environmental Justice. The event occurred via video-conferencing on April 16-17, 2009 at the University of the Cordilleras, Baguio City, University of the Philippines Visayas, Iloilo City, and Ateneo de Davao University, Davao City. The forum aimed at determining ways for courts to help in the protection and preservation of the environment. The forum enabled the Judiciary to receive inputs directly from different stakeholders in the justice system on how to improve the Special Rules on Environmental Cases now being drafted by the Court. The Supreme Court and other allied pillars of justice also signed a MOA for a more “muscler enforcement and implementation of the country’s environmental law”. The Forum itself and the MOA contributed to the goal of developing and implementing regulations and agreements that strengthen sustainable resources management for the terrestrial and marine environments (April 2009).

Related media links:

SUPREME COURT OF THE PHILIPPINES 3 DAY FORUM BULLETINS

DAY 1 - <http://sc.judiciary.gov.ph/publications/ejforum/FOEJ-04-16-09.pdf>

DAY 2 - <http://sc.judiciary.gov.ph/publications/ejforum/FOEJ-04-17-09.pdf>

DAY 3 - <http://sc.judiciary.gov.ph/publications/ejforum/FOEJ-Day3.pdf>

POSITIVE NEWS MEDIA “U.S. envoy to attend SC’s Environmental Justice Forum”

http://www.positivenewsmedia.net/am2/publish/Events_26/U.S._envoy_to_attend_SC_s_environmental_justice_forum.shtml;

NEWS TODAY ONLINE “Forum on environmental justice starts today”

http://www.undp.org.ph/?link=news&news_id=199;

GMA NEWS.TV “Environmental justice forum set after Holy Week”

<http://www.gmanews.tv/story/155664/Environmental-justice-forum-set-after-Holy-Week>;

SUN STAR DAVAO “Environment justice forum at HCDC”

<http://www.sunstar.com.ph/davao/environment-justice-forum-hcdc>

- **Forum of Women Leaders in Biodiversity Conservation:** The Philippine Judicial Academy and DOI-ITAP recognized the important contribution of women leaders involved in Biodiversity Conservation. Their work and stories highlighted the first round-table discussion of women leaders in biodiversity conservation, which brought together many of the notable national women leaders for the first time. During the forum, these leaders shared experiences and lessons in policy implementation, and the prosecution and adjudication of rules related to biodiversity conservation. Those who attended included: PHLIJA Chancellor, Justice Amuerfina Melencio A. Hererra; Ombudsman Merceditas Gutierrez ; Bantangas Governor Vilma Santos Recto; DENR Undersecretary Mary Ann Lucile Sering; Isabela Governor Grace Cielo M. Padaca; Protected Areas and Wildlife Bureau Director Mundita S. Lim; Bureau of Fisheries Regional Director Rosa F. Macas; Court of Appeals Justice Portia Hermecuellos and DOI-ITAP Philippines Manager,

Cynthia Perera. Several major newspapers published coverage on the discussion and disseminated NRM issues to a wide Filipino audience (September 2008).

Related media links:

GMA NEWS.TV “DENR eyes new lawyers from provinces for 'Green Legal Army'” “10/02/2008 <http://www.gmanews.tv/story/124610/DENR-eyes-new-lawyers-from-provinces-for-Green-Legal-Army>;

THE MANILA TIMES “Gov. expresses fears over persistent illegal logging in province”

<http://www.manilatimes.net/national/2008/sep/18/yehey/prov/20080918pro4.html>

PHIL DAILY INQUIRER “From the air, gov finds illegal logs in Sierra Madre”

<http://newsinfo.inquirer.net/inquirerheadlines/nation/view/20080917-161130/From-the-air-gov-finds-illegal-logs-in-Sierra-Madre>

PHIL DAILY INQUIRER “Ro-Ro used in illegal trade in wild animals”

<http://newsinfo.inquirer.net/inquirerheadlines/nation/view/20080918-161340/Ro-Ro-used-in-illegal-trade-in-wild-animals>

PHIL DAILY INQUIRER “PAWB SAYS Wild animals smuggled into RP through southern backdoor” <http://newsinfo.inquirer.net/breakingnews/nation/view/20080917-161247/Wild-animals-smuggled-into-RP-through-southern-backdoor>

- “Multi-Sector Forum for the Development of the Green Guide”: DOI-ITAP supported and facilitated the national multi-stakeholder workshop to develop the “Manual and Training Design for the Green Courts Green Guide” held from July 16-18, 2008 at the Pearl Manila Hotel in Ermita, Manila. The forum was organized jointly by the Philippine Judicial Academy, Ateneo School of Government, United States Agency for International Development, United States Department of the Interior, Asian Environmental Compliance and Enforcement Network, and Philippine Tropical Forest Conservation Foundation. The three-day workshop included five justices of the Court of Appeals, eight trial court judges, three prosecutors, five solicitors from the Office of the Solicitor General, seven environmental law practitioners, four lawyers from the Department of Environment and Natural Resources (DENR) and the Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR), an officer of the Philippine National Police (PNP)-Maritime Command, and a lawyer-observer. The activity directly contributed to the goal of developing and implementing regulations and agreements which strengthen sustainable resources management for the terrestrial and marine environments (July 2008).
- Environmental Law Enforcement Summit: U.S.AID/Philippines and DOI-ITAP supported and facilitated the first Environmental Law Enforcement Summit held in the Philippines. The event, hosted by the Secretary of the Environment and Natural Resources, focused on strategies to enforce environmental laws—including those related to natural resources and contamination. A multi-government agency Understanding was signed as a testament to their commitment to this effort. The efforts pursued by DOI-ITAP follow the recommendations put forth during this summit (August 2006).

Increase in the number of GRP personnel trained under U.S.G sponsored or supported capacity building program on NRM and conservation of biological diversity

- Building Capacity and Team Building: From September 3 to October 3, 2009, DOI-ITAP provided capacity building and team building training to the 42 members of the Isabela Forest Protection Task Force in Pagudpud, Ilocos Norte (September – October 2009).
- Training for Green Courts: DOI-ITAP continued to provide technical assistance to the Philippine Judicial Academy (PHILJA) as it develops the capabilities of the designated environmental courts. DOI-ITAP attended several consultations and meetings convened by the PHILJA. These consultations identified the need to update the databank of existing environmental cases, and to improve the capacity of the courts and other pillars of the Justice System, particularly the judges of the designated environmental courts. PHILJA is in the process of developing this capability building training program for the judges, and DOI-ITAP will continue to support this effort. This preparatory work with PHILJA will increase the number of GRP Judges trained under a U.S.G-supported capacity building program leading to NRM conservation and biological diversity (on going).
- Development of Standard Training Curriculum: Beginning May 24, 2007, DOI-ITAP is supporting the Philippine Government in the development of a “Standardized Environmental Law Enforcement (ELE) Training Curriculum”. The Training Curriculum is being developed through a multi-agency process, by various GRP training institutions and members of ELE Working Group (ELEWG) to standardized, complete, and make ELE training programs responsive to the training needs of regular environmental law enforcers. The curriculum development is being generated and reviewed by participants from Public Safety College, NBI Academy, Coastguard Academy, Maritime Training Command, DENR Centro Academy, BFAR and AFP, Fish Project and representatives for ELEWG.

DOI-ITAP is supporting this plan by providing resources for drafting, facilitating the process and providing documentation support. DOI-ITAP is set to bring those working on the draft to a Training Facility in the U.S. to expose them to an existing standard ELE training program.

The training design has been finalized while the preliminary contents of each topic has been taken and collated from existing training modules of the various agencies.

Once fully developed this U.S.G assistance will greatly enhance the capacity of GRP enforcers, to implement environmental law. Furthermore, using the curriculum on a national scale, as envisioned by GRP, multiply the impact of this initiative several folds over, both in qualitative and quantitative terms (ongoing).

- Customs, Immigration, Quarantine and Security ELE Training: at the request of the Mindanao Development Council (MEDCO) through PAWB-DENR and BFAR, DOI-ITAP provided technical assistance in training the Customs, Immigration, Quarantine and

Security (CIQS) personnel of the six major ports and airports in Mindanao and Palawan on implementation of CITES and laws related to biodiversity conservation. Training benefited CIQS personnel from Davao, Zamboanga City, Cotabato City, Cagayan de Oro City, General Santos City and Puerto Princessa, Palawan (February 2009). The training is expected to have significant contribution to the biodiversity protection of the whole of Mindanao.

- **Training Preparation for Mooring buoy Installation:** DOI-ITAP Conducted initial consultation on the training for mooring buoy installation and equipment needs of Tubbattaha Reef Natural Marine Park (May 2009). Completion of training on mooring buoy installation is expected in the first half of 2009. This training is special in a sense that only the U.S.G has the access to this proven technology and initial batch of trainees will be the first to group to receive such training in the country. The training will produce the first batch of personnel from GRP will be armed with this special skill (May 2009).
- **Train-the-Trainer Law Enforcement Training:** DOI-ITAP conducted a one-week workshop with an array of representatives on the investigative roles within environmental enforcement in the Philippines. DOI-ITAP teamed with trainers from U.S.AID, FISH Project, Philippine Environment Governance, Tanggol Kalikasan, WWF-Philippines, and other NGOs to conduct the training on natural resources law enforcement for managers. This workshop focused on two pressing needs: (1) capacity-building for agencies' investigative roles, and (2) investigative management skills for mid-level staff (December 2005).
- **Follow-up Law Enforcement Basic Training:** DOI-ITAP conducted follow-up law enforcement training in February 2004. The trainees were drawn from several local and national jurisdictions and the training focused on marine law enforcement (March 2004).
- **Law Enforcement Basic Training:** a DOI-ITAP team of two marine law enforcement specialists offered a two-week training session in basic marine boating and law enforcement skills in Batangas Province, Philippines. The training included participants from "Bantay Dagats" (local marine patrols) and NGO representatives who have responsibilities for marine law enforcement near shore waters and marine protected areas. Experts from DOI-ITAP and several Philippine government agencies and NGOs led the training sessions. The sessions included training in basic patrol and arrest techniques, fish identification, local marine law, interagency coordination, and basic boating and safety (February/March 2000).
- **Marine Law Enforcement Assessment:** a DOI-ITAP team completed a needs assessment in the Philippines to prepare for skills training in marine law enforcement for Philippine governmental agencies and NGOs with jurisdiction and responsibility in protecting the marine environment (December 1999).

Increase in the number of policies, agreements and regulations implemented to protect natural resources and biological diversity.

- ***Technical Assistance to the Supreme Court. DOI-ITAP is continuing to provide technical assistance to the Supreme Court in the development of the Rules on Environmental Cases. From October to December of 2009, DOI attended a total of five regional Sub-committee meetings. (October to December 2009)***

- Membership in the Sub-Committee to the Supreme Court: DOI-ITAP continued to provide technical assistance to the Supreme Court through membership in the sub-committee on the Rules on Environmental Cases. The sub-committee is part of the regular committee of the Supreme Court tasked with developing reviewing and amending rules and procedures in all Philippine courts. The sub-committee reviews the Draft Rules of Procedure for Environmental Cases developed by the judiciary's Technical Working Group (TWG) before the same is promulgated by the Supreme Court as part of the Rules of Court. The sub-committee is chaired by Chief Justice Reynato Puno, and its members include: Justice Presbitero Velasco, Jr., Justice Diosdado Peralta, Justice Lucas Bersamin; Justice Ma. Alicia Austria-Martinez, Undersecretary Mary Ann Lucile Sering, Judge Myrna Lim Verano, Judge Rafael Lagos, Prosecutor Anthony Foz and Asis Perez of DOI-ITAP.
 - From July 3, 2009 to September 2009 the sub-committee conducted 12 sessions covering the entirety of the Civil Procedure section. Discussion on the Criminal Procedure section of the Rules started on October 8, 2009 (Jul-Sep 2009).

- Environmental Courts Established: The Supreme Court has designated 117 trial courts as "environmental courts" to hear cases involving violations of laws protecting the country's natural resources and to speed up their resolution. The resolution dated November 20, 2007, approved the recommendation of the Philippine Judicial Academy to designate such courts for improved environmental adjudication in the country. These environmental courts will handle all types of environmental cases, including violations of the Fisheries Code, National Integrated Protected Areas System Act, Clean Air Act, Clean Water Act, Ecological Solid Waste Management Act, Coconut Preservation Act, and Toxic Substances and Hazardous and Nuclear Wastes Control Act. Along with other GRP partners, DOI-ITAP participated in the discussion of the environmental court's creation and contributed research materials to the Philippine Judicial Academy. The creation of the environmental courts is likely to speed the resolution of environmental cases, and thereby enhance management of natural resources. Timely resolution of environmental cases will also contribute to the goal of reducing the potential of violent conflict over control, exploitation, trade or protection of natural resources (November 2007).

Related media links:

PHIL DAILY INQUIRER "SC identifies 117 environmental courts"

<http://newsinfo.inquirer.net/breakingnews/nation/view/20080113-112112/SC-identifies-117-environmental-courts>

PHILIPPINE INFORMATION AGENCY "Green courts must punish environment plunderers, says Sen. Pia Cayetano"

<http://www.pia.gov.ph/?m=12&sec=reader&rp=1&fi=p080116.htm&no=1&date=01/16/2008>

THE MANILA BULLETIN “Chief Justice orders ‘green courts’ inventory”
<http://beta.mb.com.ph/node/199207>

- Development of Special Rules on Environmental Cases. Since January 2009, DOI-ITAP has provided technical assistance to the Philippine Supreme Court in the development of Special Rules of Environmental Cases. The DOI-ITAP In-Country Representative is assisting todrafting of the rules and is the lead person for the chapter on Criminal Procedure. The draft contains many provisions, which if approved shall ease the burden preserving evidence and facilitate the filling and prosecution of environmental crimes. Many of the suggestions in draft originated from the Multi-Sectoral Consultation Workshop convened by PHILJA and supported by DOI-ITAP in July of 2008. The special rules are set to be effective through the Philippines this year. Once promulgated, the special rules are likely to result into effective prosecution and adjudication of environmental cases. Effective prosecution in turn will contribute to the goal of implementing regulations and agreements which strengthen sustainable resources management both for the terestial and marine environment.

More over, effective prosecution and adjudication of cases is expected to bring about the required deterrent effect of law and regulations. Hence, this single U.S.G supported effort is expected to directly contribute to the goal putting the terestial and marine environment of the entire country under improve management and protection (ongoing).

- Development of Standard Environmental Law Enforcement Protocols: DOI-ITAP is assisting GRP agencies in the development of the standardized protocols and procedures for environmental crimes, prescribed in the ELE summit. Four protocols are now in the various stages of development:
 - “Wildlife Law Enforcement Protocol”: this manual is a multi-agency project. The draft of the manual is now awaiting approval with the Office of the Secretary. This manual is the first of its kind in Southeast Asia. U.S.AID Regional Program, ASEAN-WEN also expressed an interest to support this initiative (started February 2008).
 - “Marine Wildlife Enforcement Procedure”: this draft was prepared with by BFAR and FISH Project. DOI-ITAP supported and facilitated the final consultation. BFAR is now consolidating inputs to the draft.
 - “Forestry Enforcement Protocol”: a committee was formed to start the drafting process, with the Bureau of Forestry and EcoGov Project taking the lead.
 - “Fisheries Enforcement Protocol”: the National Fisheries and Aquatic Resources Management Council (NFARMC) and BFAR Director agreed to the idea of developing protocols through the process of reviewing and consolidating the various Fisheries Administrative Orders. BFAR and FISH Project will assume the lead in finalizing the protocol.

Once fully developed and approved, these protocols will greatly improve the process of ELE implementation on the national scale, thereby increasing effectiveness and efficiency of agencies to manage and protect both terrestrial and marine resources. In turn the efficiency and effectiveness will bring about the desired increase in the number of hectares of biologically significant areas under improved management and protection.

Moreover, the protocol development is contributing to the goal of increasing the number regulations, policies and agreement that will enhance the protection of biological diversity, the application of which, once approved shall be on a national scale.

Increase the number of hectares of biologically significance areas under improved management through strengthening interagency coordination and collaboration on law enforcement.

DOI-ITAP is assisting with the creation of multi-agency ELE task forces in several geographic areas in an effort to strengthen interagency and cross-sector coordination and collaboration:

- *Continuation of assistance to Isabela Forest Protection Task Force. DOI-ITAP continues to provide assistance to the Isabela Task Force on Forest Protection:*
 - *October 12, 2009. DOI-ITAP held a meeting with Dave Siquia, Executive Assistant to Governor Grace Padaca, regarding the conditions for auction of confiscated logs. DOI-ITAP supports the inclusion of certain conditions to make the proposed auction fair and transparent and to ensure that violators do not have the opportunity to justify possession of illegally acquired forest products.*
 - *November 13 and 24, 2009. At the request of Governor Padaca, DOI-ITAP assisted the Taskforce during the bidding of Timber by the National Resources Development Corporation; 455,000 board feet of the total confiscation of 1,800,000 board feet was bid for on November 13 and 24. A total of Php. 8,810,945.00 (\$191,542.00) was made in the sale, 90% of which was turned over to the Province of Isabela for use in its succeeding operation.*
- *Joint USAID-DOI-ITAP site visit. DOI accompanied USAID in an official visit to project site in the Province of Isabela. Activities during this trip included: 1) a visit to the Provincial Log Pond where the 1.8M board feet of confiscated logs are lodged, 2) a meeting with the operatives at the main camp of the Provincial Task Force in Abuan River, Ilagan, Isabela, 3) a private meeting with Governor Grace Padaca, 4) observation and attendance at a forum where results of the survey done by Tanggol Kalikasan and volunteer students to gauge the awareness of constituents on the ongoing anti-illegal logging campaign were presented. The team also attended a solidarity concert together with the members of the Task Force, partners and community in the main camp along the riverbanks of Abuan River to celebrate*

partnerships and effective collaborations in facing challenges ahead to combat illegal logging in the last remaining primary forest in Luzon. (December 2009)

- Sierra Madre, Isabela: DOI-ITAP provided technical assistance to the Governor to effectively respond to the rampant illegal logging taking place in the Sierra Madre National Park. Beginning March 2008, DOI-ITAP provided continuing technical assistance in the form of organizational development, training, and capacity building to the Isabela Forest Protection Task Force. DOI-ITAP activities included:
 - a. Facilitating a needs assessment workshop (April 2008)
 - b. Leading an ELE training course (May 2008)
 - c. Facilitating a donor's meeting to bring media and donor attention to this effort (September 2008)
 - d. Continuing technical assistance to a Provincial Task Force that:
 - i. Effectively prevented illegal logging in a large portion of the Northern Sierra Madre Natural Park, resulting in improved management of over 100,000 hectares of biologically significant area. The effort also resulted in the production of two documentaries entitled "Si Gob at ang mga Bogador" and "Itim na Ginto" that gave a wide Filipino audience more knowledge on the importance of conserving the country's biological diversity as well as better access to information regarding sustainable NRM practices; and
 - ii. Confiscated 1,224,464 Board Feet of illegally cut lumber, valued at 19.6M Pesos, from January to October 2009. The following is a table summarizing the Isabela Task Force's lumber confiscation through October 2009.

PLACE	TOTAL VOLUME (BOARD FT)	ESTIMATED VALUE (P)
Summary Update 2008 (July - Dec)	513,758	7,914,019
Ilagan (Jan 7 to Sep 26, 2009)	201,029	3,009,196
San Mariano (7-day operation)	884,039	12,536,761
Yeban, Benito Soliven (Jan 12 to Oct. 21, 2009)	131,149	3,937,356
Surcoc, Naguilian (Jan. 08 to April 29, 2009)	1892	65,765
Cauayan City (March 24 to Sept. 25, 2009)	6,350	124,252
Grand Total	1,738,218	27,587,351

Note: 27,587,351 Filipino Pesos is the equivalent of U.S. \$579,566

Related Media Links:

- PHILIPPINE DAILY INQUIRER: “Raids expose extent of Sierra Madre illegal logging”, http://newsinfo.inquirer.net/inquirerheadlines/regions/view_article.php?article_id=151930;
- PHILIPPINE STAR: “Atienza sacks DENR chief in Isabela”, at <http://www.philstar.com/index.php?Nation&p=49&type=2&sec=28&aid=2008081348>
- GMA’s “24-Oras” TELEVISION BROADCAST: “Si Gob at ang mga Bogador”, anchored by Mike Enriquez on August 25 and at “I-Witness” program by correspondent Howie Severino. Full length copy of the I-Witness episode was uploaded in the internet and can be reached through the following links:
 - Part 1: <http://www.youtube.com/watch?v=yNGK-K8oA6c>;
 - Part 2: <http://www.youtube.com/watch?v=pKjgdvTAhX8&feature=related>;
 - Part 3: <http://www.youtube.com/watch?v=uLOkWBAPeJo&feature=related>; and
 - Part 4: <http://www.youtube.com/watch?v=uZcLPPpfaTo&feature=related>

- **Contunuation of Technical Assistance and Coordination with Task Force Taal Lake.** *DOI-ITAP continued to monitor the progress of Task Force Taal Lake during the October to December period. Based on the report, the Task Force has already dismantled a total of 5,024 illegal structures consisting of 4,266 fishcages and 758 fishpens. (October to Decemeber 2009). During the same period, the Taal Lake PAMB Excom and the PAMB En-banc finalized and approved the Taal Lake Management Plan. Major accomplishments in the plan include the protection of fish corals in Pansipit River and Taal Lake and identification of the Taal Volcano Crater as a Strict Protection Zone. (October –December 2009)*

Taal Lake, Batangas: In 2008, DOI and Tanggol Kalikasan supported the training and organizational development of the Taal Lake taskforce in the Province of Batangas. As of December 2008, this Task Force had successfully:

- a) Illegal Structures Removed from Pansipit River and Taal Lake: While scientific study has yet to confirm this claim, it is believed that the clearing of the 9.5 Kilometers Pansipit River of illegal structures has greatly improved the biophysical condition of the river, while the demolition of over 2,500 illegal structures in the lake itself has greatly improved the biophysical condition of the 35,000 hectare lake (ongoing).
- b) Removed Illegal Fish Pens: Guided and inspired by its initial success in the Pansipit clearing operation, the taskforce has taken on a far greater task: the identification and demolition of the fish cages in excess of the six thousand legal

cages, which are authorized by the Unified Rules of Taal Lake. In August 2009, the taskforce started removal of undocumented fish cages in the town of Talisman Batangas, where most of the illegal fish cages are located (August 2009).

- c) Capacity Building of Provincial Government: U.S.G assistance in creation and capacity building of the Taal Lake Task Force has contributed to institutional capacity of the Provincial Government of Batangas and the Members of the PAMB to effectively manage the 65,000 hectares Taal Volcano Protected Landscape.

The training in turn contributed to the increase in the number of people that received U.S.G's supported training in environmental law enforcement, while the various articles published and television documentaries produced gave a wide range of Filipino audience knowledge on the importance of conserving the country's biological diversity as well as to access to better information for decision making or adoption of sustainable NRM practice (ongoing).

Related media links:

GMA News TV "Illegal fishpens in Taal Lake dismantled"
<http://www.gmanews.tv/story/149835/Illegal-fishpens-in-Taal-Lake-dismantled>;
 BU.S.INESS MIRROR "Slow pace of fish-pen demolition on Laguna de Bay dismays Atienza"
<http://www.businessmirror.com.ph/0620&212008/nation05.html>;
 Report from DENR Calabarzon Region Office -
<http://calabarzon.denr.gov.ph/pdf%20files/proud%20act/Pansipit%20River%20Cleared%20from%20Fish%20Cages.pdf>

Assessment and initial contact in Mindanao, March 10-12: DOI-ITAP had initial meetings with the Executive Secretary of the Autonomous Region in Muslim Mindanao (ARMM), DENR Secretary Kabuntalan P. Emblawa, DA Secretary Al Hadj, Sajid Sangki Druz Ali, Director of the BFAR-ARMM Keise Usman, Al Haj, Director Marzan of DENR PAWB-ARMM. The meetings gave DOI-ITAP an overview of regional resources that need protection. During the round table discussion with regional agencies, the BFAR, DENR, PNP, PNP-MG, and DOTC-MARINA, each agency shared their respective mandates and concerns on environmental issues in ARMM. DOI-ITAP shared the ongoing initiatives and approaches now being employed by DOI and its partner institutions. This was followed by a workshop on identification and prioritization of Environmental Law Enforcement activities. Among the activities identified were:

- a. Assistance in the full operationalization of the MCS Team to be able to effectively operate especially in the provinces.
- b. Capacity Building for ARMM agencies involve in enforcement of Environmental laws.
- c. Capacitate local government units on how to effectively undertake or improve on their environmental law enforcement mandates

These meetings and preliminary assessment enable DOI-ITAP to identify activities and appropriate approaches where U.S.G assistance can be given that will result into improve NRM and conservation of a significant part of ARMM.

Success Story

One month after the first Environmental Law Enforcement Summit, well-coordinated multi-sector efforts between the Philippines Government, NGOs, and local communities resulted in two large and high-profile crackdowns on illegal environmental activities: one on logging and one on hazardous waste dumping. The unprecedented communications and coordination between these various sectors, which also combined financial resources to conduct these crackdowns, was possible only after the Philippines Government clearly demonstrated its commitment to environmental law enforcement at the Summit. Three years since, DOI and the GRP are actively working to addressing the priorities identified during the Summit, continuing to successfully integrate the diverse sectors to contribute to each of these efforts.

Program Management

- Representatives Assistant: Approved the hiring of an Assistant for In-Country DOI-ITAP Representative Mr. Asis Perez, to assist with management, coordination and communication of program activities during the next phase of the ELE program (October 2009).
- Development of Scope of Work: DOI-ITAP Washington, DOI In-Country Representative, and U.S.AID/Philippines staff discussed and developed the Draft Scope of Work for the Second Phase of PBC Project, which will begin in 2009 and continue through 2014. (July 2009 – October 2009).
- In-Country Program Review: the DOI-ITAP Philippines Manager traveled to the Philippines in September, 2008 to:
 - Present at the first Women's Leaders in Biodiversity Conservation Conference.
 - Meet with many high-level Philippines Government and NGO representatives, and U.S.AID and embassy staff, to ensure the program is responding to appropriate needs.
- Mid-Year Program Review: a DOI-ITAP team consisting of two experts traveled to the Philippines to conduct a mid-program review of DOI-ITAP activities in the country and met with key Filipino law enforcement officials and U.S.AID/Philippines staff (April 2007).
- Meetings and Study Tour to the U.S.: DOI-ITAP hosted a U.S.AID/Philippines representative and the DOI in-country representative for two days of meetings in Washington, DC. The guests learned about the U.S. Fish and Wildlife Office of Law Enforcement's various capabilities that may be modeled in the Philippines, as well as Office of Surface Mining's environmentally protective mining practices (December 2006).

- DOI-GOP MOU: DOI-ITAP has signed a MOU with the Government of the Philippines (GOP) that underscores U.S. Government commitment to assisting the GOP with its coastal and forest resource law enforcement (June 2006).
- Selected In-Country DOI-ITAP Representative: DOI-ITAP selected Mr. Asis Perez, a Filipino Environmental Attorney who heads the NGO Tanggol Kalikasan, to serve as the in-country DOI-ITAP representative. Mr. Perez will coordinate and communicate with the GOP as needed on DOI-ITAP-related activities (March 2006).
- Environmental Law Enforcement Needs Assessment: a DOI-ITAP team consisting of a DOI-ITAP project manager and two law enforcement special agents conducted an assessment to determine how DOI-ITAP can best assist the various Philippine government agencies and NGOs to improve their law enforcement capabilities that combat illegal natural resource extraction and degradation of coastal marine and upland timber resources. This team met with numerous Philippine and U.S. entities (including the U.S. Embassy) and key law enforcers from the ministry to the village level. While in country, the Philippine press published an article outlining the intent of DOI-ITAP to assist the GOP over the next three years (March 2005).

SIGNIFICANT PROBLEMS OR DELAYS

Three planned activities are still pending under this program. They are:

- Prepare for mooring buoys installation training and technical assistance in the Tubbataha Reef
- Provide much-needed equipment to Tubbataha Reef rangers
- Sponsor and facilitate a Study Tour to U.S. ELE Training Center and Wildlife Forensics Laboratory

The first two items, related to the Tubbataha Reef, were postponed past the May 31, 2009 deadline of the current U.S.AID-DOI Agreement due to issues with getting the mooring equipment and materials to the site on time.

Regarding the Study Tour, this has been postponed 3 times, since November 2008, due to conflicts in the schedules of the main GRP representatives who would be participating in this event. The latest date for it was early May 2009, but again it was postponed and has not been rescheduled as of December 2009.

ADDITIONAL INFORMATION

Reports describing the results of DOI-ITAP technical assistance in the Philippines are available upon request.

Section III: Completed Programs

The following are summaries of the Department of the Interior's completed technical assistance programs by region. New material in the body of the sections below is in ***bold italics***.

Central America & the Caribbean

Central America • Regional Fire Management Program

At the request of the USAID/Guatemala – Central American Programs (USAID/G-CAP), DOI-ITAP provided technical assistance on fire management and forest pest control in eight Mesoamerican countries: Panama, Costa Rica, Nicaragua, El Salvador, Honduras, Guatemala, Belize, and Mexico. Under this program, DOI-ITAP delivered its assistance through:

- Small grants for grass root level fire prevention and control activities
- \$320,000 in small grants was disbursed and was matched nearly 1:1 by the recipients
- Emergency Fire Preparation and Response/Control

DOI-ITAP worked with the Wildlife Conservation Society to strengthen the wildfire prevention capabilities of CONAP and its partner organizations, with a particular focus on the Mayan Biosphere Reserve and Laguna del Tigre National Park in Guatemala. Supported activities included: (1) controlling and monitoring susceptible areas; (2) improving field communications; (3) monitoring hot points on satellite images and evaluating the extent of areas affected by fire; and (4) providing limited support to CONAP's partner organizations. A DOI-ITAP fire expert also conducted an emergency forest fire response assessment at the request of GOG.

DOI-ITAP experts conducted numerous workshops and courses on fire management topics, including: the role of wildland fuels in fire behavior and ecological impacts of fire; basic firefighting skills; dendrochronology and historical fire studies; and forest fire causes. DOI-ITAP also assisted in the development of a fire prevention manual.

- Communications systems purchase and installation

DOI-ITAP conducted a workshop in Nicaragua to standardize satellite detection technology and improve the regional sharing of data. A geographic information systems workshop was also conducted in Mexico for Central American and Mexican fire managers on basic aspects of interpreting satellite images for fire detection and response.

- Forest Pest Management

Several training courses and workshops were held to train forest managers on the identification of harmful forest pests and to assist the governments in responding to damage caused by these pests. Topics of focus included the evaluation of actual case studies and the creation of a regional network of technical and professional staff to increase cross-border communication of conditions and responses related to forests pests, in addition to sharing of new strategies and technologies.

- Economic Valuation

Economic valuation workshops were completed throughout the region to assist the governments in valuing the damages caused by wildfires to natural resources. This training will better enable the governments to recoup damages from wildfires and lead to a better understanding of the positive impact that protected areas and natural resources have on the regional and individual country economies.

Central America • Sustainable Tourism at Mayan Archaeological Sites

DOI-ITAP signed a five year Memorandum of Understanding (MOU) with the Mundo Maya Organization (MMO) to provide technical assistance and training to the MMO countries (Belize, El Salvador, Guatemala, Honduras, and Mexico). DOI-ITAP has provided technical assistance to 12 selected Mayan sites in the areas of protection and maintenance of natural and cultural resources; visitor infrastructure, services and education; capacity building; and community participation. DOI-ITAP staff members worked closely with in-country archeologists, park managers, engineers, economists, and local communities. Achievements included a park management plan for Rio Amarillo, Honduras; and park infrastructure evaluations in Guatemala and El Salvador.

Central America/Dominican Republic • Cooperative Conservation

DOI-ITAP provided technical assistance to regional countries to solidify and expand the use of creative public-private partnerships to achieve environmental, recreational, cultural and economic objectives within, and adjacent to, protected areas in the region. DOI-ITAP provided technical assistance on multiple aspects of park and visitor management at the Mirador-Río Azul Natural and Cultural Zone, located in northern Guatemala. El Mirador, the primary archaeological site within this Zone, has been identified as one of the oldest and largest Maya archeological sites in Mesoamerica. To ensure continued benefits from this growing visitation while protecting these unique resources, it was critical that the many public, private, and community stakeholders worked together to achieve sustainable development.

For this project, DOI-ITAP worked as a direct advisor to the Government of Guatemala (GOG) and addressed issues of cross-sector collaboration, park management, visitor and park staff infrastructure, and visitor interpretation. DOI-ITAP furthermore facilitated a high-level US State Department visit to El Mirador as part of a continuing effort to promote conservation and sustainable ecotourism development.

The work DOI conducted in this area was a continuation of its previous work in this area, under a DOI partnership with the Global Heritage Fund (GHF) and the Foundation for Anthropological Research and Environmental Studies (FARES), two U.S.-based NGOs. Through this work, DOI helped to lay the foundation for the MRA Multi-Sector Roundtable, an effective and well-attended venue for stakeholder coordination and consensus-building through information sharing, planning, and decision-making. This was particularly critical considering the intense historical and ongoing conflicts over the use of the natural and cultural resources in this area.

Central America/Dominican Republic • Protected Area Law Enforcement

With funding from the U.S. Department of State and the U.S. Agency for International Development (USAID), DOI-ITAP is worked under the Central America/Dominican Republic Free Trade Agreement (CAFTA-DR) to support resource law enforcement efforts in the region. U.S. resource enforcement officers conducted on-site consultations with selected law enforcement officials in several regional countries. After a consultative process, U.S. resource enforcement officers conducted law enforcement workshops and field training in topics identified as a priority for strengthening. Specific accomplishments in Guatemala, Nicaragua, Dominican Republic, Honduras, and El Salvador included a law enforcement needs assessment, the construction of control posts, purchase of monitoring equipment, and the development and delivery of training curriculum.

El Salvador • Protected Area Management

DOI-ITAP worked to support USAID/El Salvador's strategic objective, "Economic Freedom, Improved Management and Conservation of Critical Watersheds", through the promotion and adoption of sustainable conservation practices within biodiversity rich areas of El Salvador. The work resulted in a strategy for sustainable use, eco-tourism, and income generating activities within El Salvador's Montecristo National Park and its buffer zones. Montecristo National Park is considered El Salvador's "Flagship Park," and is at present the only National Park managed exclusively by the Ministry of the Environment and Natural Resources of El Salvador. DOI-ITAP generated a comprehensive two-volume report of recommendations for the improvement and long-term sustainable management of the Montecristo National Park. The report includes content on infrastructure designs, as well as estimated budget, and a Scope of Work for how the work should be completed. A DOI-ITAP field team traveled to Montecristo National Park for the purpose of developing a final multi-year workplan focused on sustainable management of the park through tourism activities in and around the park, conservation of historic structures and development of critical infrastructure, and engagement and leverage of private sector stakeholders in the Montecristo National Park.

Guatemala • Mayan Biosphere Reserve

The 1.5 million hectare Mayan Biosphere Reserve, located in the northern Department (state) of El Petén, forms the core of the largest tract of intact tropical forests remaining in Meso-America. DOI-ITAP worked closely with the USAID/Guatemala office and Consejo Nacional de Areas Protegidas (CONAP)—the Guatemalan protected area management agency—to strengthen protected area management in the Mayan Biosphere Reserve. DOI-ITAP technical assistance in the Reserve was designed to promote and enhance coordination among managing entities within the Reserve and between the U.S. and Guatemalan protected area staff. DOI-ITAP technical assistance was also provided in other geographic areas of the country, including the Volcanoes of Atitlán in the western highlands; the Polochic-Motagua wildlife area in the eastern lowlands; and the Chisec area in northern Alta Verapaz.

Some key results of DOI-ITAP's work in Guatemala include an evaluation of the management of archaeological resources; the improvement of trails for tourists in Lake Atitlán; and the provision of a radio system and weather stations to enhance fire response, law enforcement, and search and rescue missions. DOI-ITAP also provided technical training related to law enforcement, fire prevention, and park management.

DOI-ITAP also forged a relationship between Colombian and Guatemalan law enforcement staff who share many common issues. Since the close of this program, the Colombians have expanded their cooperation with Guatemala to work on broader issues related to the drug trade.

Guatemala/Mirador-Rio Azul • Sustainable Tourism Development

DOI-ITAP provided technical assistance on multiple aspects of park and visitor management at the Mirador-Río Azul Natural and Cultural, located in northern Guatemala. El Mirador, the primary archaeological site within this Zone, has been identified as one of the oldest and largest Maya archeological sites in Mesoamerica. To ensure continued benefits from this growing visitation while protecting these unique resources, it was critical that the many public, private, and community stakeholders worked together to achieve sustainable development.

For this project, DOI-ITAP worked directly as advisor to the Government of Guatemala to specifically strengthen the management and protection of the Mirador-Río Azul zone; and build the capacity within the Government of Guatemala and the local gateway communities to provide visitor guide and other services, thus ensuring that the tourism is economically beneficial. DOI-ITAP directed its assistance toward consensus building, stakeholder participation, and conflict resolution; park planning and administration; visitor education and orientation; visitor and park guard infrastructure design & construction; resource and visitor protection/security.

Honduras • Río Platano Biosphere

Part of the largest contiguous rain forest in Central America, the Río Plátano Biosphere Reserve is a World Heritage Site and the first and largest UNESCO-designated Man and the Biosphere Reserve (1980) in Central America. DOI-ITAP worked to protect the indigenous peoples and the biological diversity of the Río Plátano Biosphere Reserve, one of 22 international sites on the List of World Heritage in Danger. The main threats to the Reserve are illegal human intrusions and settlement across its western and southern boundaries. DOI-ITAP worked to promote the conservation of biological diversity by direct actions in the Reserve and helping the Government of Honduras establish administrative controls throughout the Reserve.

DOI-ITAP's work in Honduras mainly dealt with economic development, tourism, community participation, and local capacity building. Key initiatives included assisting the establishment of the first two lending banks in the Reserve; helping create some initial infrastructure in the Reserve including food, lodging, and restroom facilities; and developing promotional materials to attract tourists. DOI-ITAP also provided training in endangered species conservation; strategic planning; decision-making, negotiation; conflict resolution; communication; and uses of

technology to a variety of local community, educational, political, and trade organizations in the Reserve.

In 2008, this site was named a finalist for the Tourism for Tomorrow award bestowed by the World Travel and Tourism Council. This award is given annually to tourism sites that have proven themselves to be world leaders in the global trend towards sustainable development and tourism.

***Jamaica* • Ministry of Land and Environment – Mines and Geology Division**

DOI-ITAP partnered with Jamaica's Ministry of Land and Environment, Mines, and Geology Division to provide training to mining inspectors. The Mines and Geology Division functions to license, monitor, and regulate all mining and quarrying activities on the island—in addition to mapping the country's geological resources. During the one week training, the 20 participants received instruction on quarry safety, sedimentation of stream channels, environmental best practices and visual impact.

[South America](#)

Bolivia • CITES training for Bolivian agencies

DOI-ITAP coordinated with USAID/Bolivia to provide CITES training to thirty representatives from relevant Bolivian agencies, including the scientific authority, immigration, national police and Interpol. The 1972 CITES convention addressed threats to plant and animal species where international trade in products from such species is a major factor in their decline. By regulating or prohibiting the trade in these products, CITES provides a powerful tool for species protection. Since the successful training, a committee comprised of the armed forces, police, and customs began to properly handle biodiversity issues and placed a special emphasis on wildlife.

Brazil • Partner Parks

A Partner Parks relationship was established in October 1997 as a result of the U.S.-Brazil Presidential summit between Everglades National Park and Brazil's Pantanal National Park. Through this relationship—facilitated by DOI-ITAP—officials from both parks visited each other and discussed issues related to park management, law enforcement, public affairs, and outreach. Visitors to the Everglades returned to Brazil with a prototype visitor information brochure produced in partnership with the Everglades public affairs staff.

Colombia • Supporting the Parks System

In October 1998, the U.S. DOI signed a Framework for Cooperation with the Colombian Ministry of the Environment. With funding from USAID/Colombia, DOI-ITAP and the Colombian National Parks Unit (CNPU) collaborated to improve the Colombian National Park system's overall management. DOI-ITAP and CNPU worked to meet identified needs at the headquarters, regional, and park levels. These needs included: equipment purchase and delivery; infrastructure design, planning, and construction; increased staffing in protected areas; and staff training.

The project helped increase the numbers of protected area contracted staff throughout the Park system, thereby elevating institutional presence in an effort to decrease the negative impacts wrought by illegal human settlements, illegal use of the resources, and drug trafficking. One hundred and fifty-eight staff was contracted under the project, including 50 professionals, 76 local park rangers, and 32 technicians. The most extensive areas in the System (Puinawai, Chiribiquete, Nukak and Cahuinari) tripled their capacity for coverage and mobility.

The Colombian National Parks Unit identified several critical park operations and infrastructure maintenance needs, such as renting office space; maintaining park infrastructure and vehicles; and providing office supplies and fuel and lodging for park staff within the protected areas and those traveling from headquarters and regional offices. Through this program, DOI-ITAP transferred funds to Columbia's Corporación for Environmental and Cultural Protection and

Territorial Code (Corporación) for park operations, infrastructure, and travel/per diem that enables direct contact between national, regional, and park level staff. Corporación purchased fuel and covered tickets/travel expenses in order to guarantee the optimum placement of staff in the field. In addition, Corporación entered into contracts for corrective and preventative maintenance of CNPU vehicles, motorcycles, boats and other park equipment. Eight fences were constructed and installed in Catatumbo Bari. Corporación also performed maintenance of headquarters and control stations at several parks. The headquarters facilities were leased at Las Hermosas.

Two training sessions were conducted. The first session addressed the level of stress that many on-duty Park staff experience as a result of the tenuous security situation in certain parts of the country. The second training was focused on environmental and conservation issues.

Park staff required very basic equipment in order to perform their jobs. CNPU's equipment needs varied from park to park, but typically included such items as vehicles, motorcycles, boats, generators, motors, field gear, computers, GIS equipment, printers, photocopiers, cameras, software, communications equipment, and fire fighting equipment. Through this project, essential equipment such as vehicles, digital cameras, computers, printers, GPS units, and bicycles were procured.

Ecuador • Conserving Biodiversity in Protected Areas

DOI-ITAP provided technical assistance to help the USAID/Ecuador Mission accomplish conservation of biodiversity in selected protected areas and their buffer zones. DOI-ITAP provided technical assistance to the Nature Conservancy and its partners, Fundación Antisana and Fundación Ecológica Rumicocha, on key components of The Nature Conservancy's Project Bioreserva del Condor in five of Ecuador's high Andean protected areas: Cayambe-Coca Ecological Reserve; Antisana Ecological Reserve; Cotopaxi National Park; Sumaco Galeras National Park; and Cotacachi Cayapas buffer zone. DOI-ITAP also provided technical assistance to CARE and its partners, Ecociencia and Jatun Sacha, on the SUBIR project and the Southern Border Development Program. Moreover, DOI-ITAP provided technical assistance to Galapagos National Park in support of conservation of the rich biodiversity on the Galapagos Islands. Additional partners included the Charles Darwin Foundation, Japan International Cooperation Agency, the Nature Conservancy, WildAid, and the World Wide Fund for Nature. Specific activities included environmental and interpretation education, oil spill response training, resource inventorying and monitoring, assistance with Spectacled Bear research, visitor center development, water resource management, aerial photography, fishery assistance, invasive species management, law enforcement training, museum curation, remote sensing instruction, aircraft maintenance, and strategic planning reviews.

Ecuador • Galápagos Island Equipment Support

Conservation of Galápagos National Park remains a major challenge. In recent years, conflicts between fishermen and local conservation authorities have led to fierce rhetoric, violent action,

and pressures from powerful stakeholder groups—all of which can dominate decision-making at the expense of conservation and responsible resource management. DOI-ITAP signed an Interagency Agreement with USAID/Ecuador to provide technical support for enforcement activities to Galápagos National Park. After completing a law enforcement needs assessment, DOI-ITAP procured a Seawolf amphibious plane (single engine, boat hulled) to support Galápagos law enforcement. Park staff was trained on its operation and maintenance. The Guadalupe River, an existing aluminum vessel used for many law enforcement and other purposes by the park staff, was also repaired and retrofitted through a contract facilitated by DOI-ITAP.

Peru • Improved Environmental Management in Targeted Areas

DOI-ITAP provided technical assistance to support Peru's Instituto Nacional de Recursos Naturales (INRENA—*dissolved with the 2008 creation of the Environment Ministry, which absorbed some INRENA functions: handling of CITES and Natural Protected Areas (NPA). Other productive areas remained within the Ministry of Agriculture, under the Direction of Forestry and Wildlife (DGFFS)*) in its protected area management efforts, particularly with regard to making the case for an increased budget for INRENA and generating increased revenue for the protected area system.

DOI assisted INRENA in the development and completion of a technical document that estimates the value of the benefits provided by the national system of natural protected areas to the national economy of Peru. The objective was to present the findings in a document format to justify increased funding for the protected area system. The activity was coordinated by a DOI specialist and Doug Southgate, an economist from Ohio State University.

DOI-ITAP worked with field staff to analyze willingness to pay for environmental services in Oxapampa. A DOI-ITAP economist helped develop the assessment questionnaire and compile background information for the willingness to pay survey. Field staff conducted the survey. The DOI-ITAP economist assisted with the analysis of the data and completion of the final report.

DOI-ITAP sponsored a five day workshop in Peru for representatives of Peru's various government agencies involved in natural resource management. The workshop was lead by Conservation Strategy Fund. Topics included: tools to effectively analyze environmental values, apply micro-economics, and conduct cost-benefit analyses in the management of protected areas; pitfalls and issues with economics of natural resources; and conducting economic evaluation of protected areas. The training consisted of a combination of presentations, exercises, market simulations, and analysis of local data.

DOI-ITAP reviewed the concessions and entrance fee program for INRENA and developed options for implementing a new fee pilot project at Paracas National Reserve—a large, popular marine park three hours south of Lima. The team focused on the level of visitor services offered at the Reserve in conjunction with what Peruvian law allows in order to recommend adjustments to the entrance fee currently in effect at Paracas. Although Peruvian law currently prohibits differentiated entrance fees (higher entrance fee for foreign vs. national visitors) and the visitor

services offered are minimal, the team presented to the Peruvian government an array of options for collecting more dollars from foreign visitors through concession operations and new fee strategies within the park. A final document in English and Spanish was produced.

Russia, Europe & Eurasia

Croatia • Ministry of Environmental Protection and Physical Planning

After regional conflicts during the early 1990s threatened their economy and security, many of Croatia's internationally recognized natural and cultural assets were not centrally managed—placing them at risk. For the first time since the current government came into power in 2000, Croatia has a Ministry of Environmental Protection and Physical Planning with a Nature Conservation Division charged with responsibility for protected areas. DOI-ITAP and the Croatian Ministry of Environmental Protection and Physical Planning signed an Agreement to cooperate on the management of protected areas and the training of their growing professional staff of park managers. In FY 2001, DOI-ITAP designed a practical training program focused on parks interpretation, education, and management in Paklenica National Park and Plitvice Lakes National Park, a World Heritage Site. The program implemented critically needed park programs and provided job skills training and temporary employment (the country's current unemployment rate is 22 percent) to 20 interns of diverse ethnicity from war-affected regions. In FY 2002, DOI-ITAP continued its work at three additional parks: Mjlet National Park, Krka National Park, and Lonjsko polje Nature Reserve. Critical equipment and supplies were also provided to the parks, including audio-visual technology for visitor centers; telescopes; microscopes; binoculars; and natural history field guides. Permanent employment was offered to several interns at the parks.

Georgia • Integrated Coastal Management

DOI-ITAP provided targeted technical assistance in interpretation under the World Bank/Global Environment Facility's Integrated Coastal Management Project. The majority of the technical assistance was been focused on Kolkheti National Park, West Georgia, which covers an area of 28,571 ha of land and 15,742 ha of marine territory. The park was established in 1999 and incorporates the Kolkheti State Reserve (550 ha; established in 1947), the adjacent wetlands, and Lake Paliastomi. Kolkheti is a designated RAMSAR site.

DOI-ITAP technical assistance was focused on various aspects of interpretation, including:

- Trail design and construction
- Trail interpretation, including signage and brochures
- Visitor facility design, including entry points, kiosks, visitor centers, campsites
- Design of interpretive materials, such as displays, brochures, posters
- Develop public outreach and education programs
- Training in oral interpretation

With the help of DOI experts, educational and informational signs in English and Georgian were developed for Kolkheti and the Kobuleti Nature Reserve. The Georgians identified local sources of fabrication and installation and installed the signs. The Minister of Environment participated in an installation ceremony. DOI experts were also instrumental in reviewing the designs of the

Kolkheti National Park visitor center and headquarters, and developing plans for the exhibits. A World Bank-funded study tour that included DOI-managed sites in the U.S. was credited with providing inspiration for the building designs.

Georgia • Protected Areas Development, Phase I

DOI-ITAP has established a long-term working relationship with the Republic of Georgia to foster a national system of protected areas in Georgia. With funding from USAID/Georgia, DOI-ITAP provided broad technical assistance at the headquarters level to establish a national training center and a national training program focused on issues of park system management, administration, and personnel management. DOI-ITAP also provided field-level technical assistance and training. DOI-ITAP pushed forward recommendations on the restructuring of the Georgia Protected Areas Department, operationalized existing management plans at Vashlovani, Tusheti and Lagodekhi National Parks, initiated reorganization of staff, provided training in landscape-level planning, established a network of sister parks, and organized study tours in Washington, DC for Georgian officials.

Russia • Endangered Species Conservation

DOI-ITAP provided technical assistance to regional and national Russian conservation agencies regarding conservation of endangered species such as the Siberian (Amur) tiger and their critical habitat. DOI-ITAP provided training to Russian parks and customs stakeholders on CITES implementation related to inspections techniques, permit processing procedures, and the role of the Scientific Authority in support of permit issuance. A manual on CITES implementation and biological identification of wildlife species in the Russian Far East was produced in support of this training. DOI-ITAP provided critical supplies to the Primorskiy Krai-based Amba Patrol, including winter hunting boots, night vision binoculars, 35mm film, ranger berets, and microcassette recorders. These federal Russian anti-poaching rangers were also participants in a five day seminar on wildlife law enforcement at Ussurisk Zapovednik. A joint report was produced with the Russian State Committee on Environmental Protection and Global Survival Network to the June 1997 CITES Conference of Parties on the positive impact of joint U.S. and Russian (government and non-governmental) anti-poaching efforts in the conservation of the Siberian tiger.

Russia • Kamchatka Peninsula

DOI-ITAP worked with the United Nations Development Program (UNDP) to provide technical assistance to selected protected areas in the Kamchatka Peninsula, Russia. Historically, Kamchatka's vast natural resources—which include more than 2,000 species of plants and approximately 10,000 Kamchatka brown bears—was protected by its remoteness, rugged landscape, and later by its strategic military importance. The economic reform and societal upheaval of recent years have resulted in severe economic hardships, and protected area budgets have sharply declined. As a result, there are significant and increasing threats to Kamchatka's

biodiversity and protected areas. In support of UNDP's comprehensive conservation and development efforts in the region, DOI-ITAP provided training in concessions contracting for protected areas in the Kamchatka Peninsula.

Tajikistan • Rangeland Management

DOI-ITAP worked in Tajikistan to build capacity of the members of a working group formed to draft management plans for three protected areas: Zapovednik Romit (Strict Nature Preserve); Zakaznik Almosi (Managed Reserve); and Nature Historical Park Shirkent. The ITAP work was part of a larger effort undertaken by the CARE organization to enhance protected areas and biodiversity management in the Gissar Mountains. The larger project is a five year project funded by the United Nations Development Programme and Global Environment Facility (UNDP/GEF) to improve conservation of globally significant biodiversity in Tajikistan through demonstration of new mechanisms and approaches to effective management of protected areas and their natural resources.

The ITAP work was designed to build capacity and improve management effectiveness in the three selected protected areas in Tajikistan with the total area of 25,000 ha. The project also strengthened the overall enabling environment for the protected area management system in Tajikistan and disseminated lessons learned and best practices among the remaining 17 protected areas in the country.

Ukraine • Museum and National Preserve Assessment

DOI-ITAP, at the invitation of the Ukrainian government and the Institute of Classical Archaeology, University of Texas at Austin, provided a four-person team to assess the Museum of Folk Architecture and Rural Life in Kyiv, and the National Preserve of Tauric Chersonesos in Sevastopol, which includes the Ancient City and the Chora, against recognized standards for interpretation. The Museum of Folk Architecture and Rural Life is a 150-hectare open-air cultural heritage park located in Pirogovo, Ukraine—a suburb of Kyiv situated several kilometers southwest of the capital city center. First opened to public visitation in 1976, MFARL aims to provide its visitors with a sense of Ukraine's architectural and cultural diversity through both space and time. Erected across the museum grounds one finds more than 200 structures (both transplanted originals and wholesale reconstructions) typifying rural Ukrainian vernacular architecture. These structures—domestic, agrarian, industrial, and ecclesiastical—are grouped together in clusters suggesting individual Ukrainian villages or farmsteads. Meanwhile, the chora, or agricultural hinterland, of Tauric Chersonesos ranks as perhaps the best surviving example of a traditional agrarian landscape yet identified anywhere throughout the ancient Greek world. Roughly 10,000 hectares of this ancient chora, situated across the Herakleian Peninsula south and east of the modern-day city of Sevastopol in Crimea, Ukraine, survived in relatively pristine condition up into the late 1960s. The National Preserve of Tauric Chersonesos (NPTC) oversees, collectively, some 500 hectares of archeologically-rich territory, dispersed among 31 separate parcels scattered across the Herakleian Peninsula. At least 20 of these NPTC parcels contain intact chora lands, most notably Area 10. Area 10 is a 150-hectare property situated in

the west central region of the Herakleian Peninsula. It is located along the Yukharina Ravine near the outskirts of modern-day Sevastopol, roughly 8 kilometers southwest of the ancient Greek polis of Chersonesos. It contains the foundations of at least nine ancient Greek and Roman farmsteads or “country estates.” Amongst these farmsteads lie many other well-preserved archeological features associated with ancient Greek agricultural and land tenure practices—namely, numerous land partition walls, agricultural roads, and vineyard plantation walls. Both areas face tourism and preservation challenges, and the team provided recommendations on issues including visitor services, education and outreach, safety, accessibility, gallery presentation, and preservation.

Middle East & North Africa

Egypt • Surveying, Monitoring and Administration of Public Lands

In 2006, the Egyptian government requested technical assistance from the DOI Bureau of Land Management with reviewing and improving the Egyptian system for surveying, monitoring and administering public land (known as “state land” in Egypt). This assistance focused on evaluating the capacity of the newly formed Egyptian National Center for Planning State Land Uses (NCPSLU or “the Center”) to fulfill its mandate, including: collection, storage and distribution of stand land data; mapping; land use planning; pricing and selling state lands; interagency coordination; and conflict resolution over administration, use and ownership of state lands. A DOI-ITAP team of BLM experts traveled to Cairo to consult with the Egyptian government and conduct an in-depth assessment of the current system for surveying, monitoring and administration of state lands in Egypt. The team spent a month in Cairo meeting with the Center and more than 25 other ministries and authorities within the Egyptian government that have state land responsibilities and provided a series of recommendations to the NCPLSU.

Jordan • Cultural Resource Management

Petra, the ancient capital of the Nabataeans, was inscribed on the World Heritage List in 1985. Petra is an archaeologically fascinating site, world famous for its magnificent building facades carved into beautiful stone canyon walls. Inhabited since Neolithic times, Petra entered its golden age when the Nabataeans chose this site to be the royal seat of King Aretas in the second century BCE. For several centuries thereafter, Petra played a dominant role on the world stage and flourished as an economic and religious center, and notably as a sacred funerary city. Petra was once a major crossroads for the caravan routes that led to Sinai, the Red Sea, the Dead Sea, Egypt and Syria. The integrity and conservation of the site are threatened by an increased flow of tourists to the site and the sideline activities this tourism engenders. In January 2003, U.S. DOI and the Kingdom of Jordan signed a Memorandum of Understanding to facilitate technical support and training to improve the institutional and organizational structure of the Petra Management Unit, site management and protection of the resources at Petra Archaeological Park and other protected sites in Jordan, and the skills of Park staff. DOI-ITAP provided technical assistance to improve management of the site.

Jordan • Cultural Resource Interpretation

With funding from the U.S. Department of State, DOI-ITAP worked in collaboration with the Jordan Ministry of Tourism and Antiquities and a USAID funded Jordan Tourism Project, Siyaha, to upgrade the visitor experience in the City of Madaba. The Project trained Jordanians in developing 10 exhibit panels for the Madaba Visitor Center, which are now in place. It also conducted a workshop for guide trainees in visitor interpretation and prepared three concession contracting packages consisting of tender offers, proposal requirements and draft contracts and simplified a previously prepared concession contracting report. The DOI-ITAP team also

consulted with numerous Jordanian representatives and developed a draft Madaba Interpretation Plan, a 38-page manual with recommendations for interpreting the major tourist sites in this ancient town near Amman. The project was completed in September 2007.

Morocco • Rural Tourism Development

In early 2005, DOI-ITAP was invited to partner with the USAID/Morocco Rural Tourism Project to provide visitor management capacity building for three targeted regions in Morocco: Pays d'Accueil Touristique (PATs) – Immouzer Ida Outanane in the south, Ifrane in the Middle Atlas Mountains, and Chefchaouen in the north. With logistical support from Chemonics International (Chemonics), a team of three DOI-ITAP experts provided a workshop for Moroccan counterparts on the process for developing site designs. In conjunction with the workshop, the team designed scenic overlooks, rest areas, a campground, and a trail for pilot locations in Ifrane and Immouzer PATs in addition to providing a series of recommendations for site construction and management. Working with local contractors, Moroccan counterparts and Chemonics constructed the facilities that were designed in cooperation with DOI-ITAP experts.

For many years at the Balcon d'Ito site in Ifrane PAT, local vendor stalls had lined the roadside and blocked the scenic view. Despite initial concerns, the vendors agreed to re-locate on either side of a rest area that was designed by DOI-ITAP and Moroccan counterparts. The newly constructed rest area has a scenic overlook with interpretive panels, benches, a small trail, and plenty of parking spaces. With these amenities, more tourists are stopping to enjoy the site, and the local vendors report that they have doubled their business since the new rest area was built.

With logistical support from Chemonics, a team of three DOI-ITAP experts provided a workshop for Moroccan counterparts on visitor education, information and interpretation. In conjunction with the workshop, the team designed display panels and a floor plan for a visitor information center in Ifrane PAT, display panels and an interpretive plan for a women's argan oil cooperative in Immouzer PAT, signs for Ifrane and Immouzer PATs, and provided a series of recommendations for visitor education, information, and interpretation in Morocco. Working with local contractors, Moroccan counterparts and Chemonics built and installed the signs and display panels that were designed in cooperation with DOI-ITAP experts/funded by USAID Morocco. In addition, they applied the recommendations of the DOI-ITAP team to upgrade the interpretive capabilities of the visitor information center in Ifrane PAT and the women's argan oil cooperative in Immouzer PAT.

Nile Basin • Collaborative Water Resource Management

The ten states that share the waters of the Nile Basin have created the Nile Basin Initiative (NBI)—an organization in Entebbe, Uganda—to coordinate their efforts. Within the NBI, several sub-basin coordinating bodies and project implementation offices have been established to carry out NBI's project implementation. The staffs of these institutions require training in diverse disciplines and familiarization with the work of similar bodies in the international

community. To that end, DOI-ITAP hosted a study tour to various national and international institutions in the U.S. for NBI staff and members and provides continuing technical assistance.

DOI-ITAP received funding from the U.S. Department of State, Oceans, Environment and Science Initiative in order to facilitate this initiative. Accordingly, DOI-ITAP participated in the third Donors and Partners Meeting of the NBI in The Hague, October 24-25, 2005. DOI-ITAP, a recognized NBI partner, participated in the meetings to strengthen US Government involvement in the NBI and its sub-basin coordinating bodies. DOI-ITAP also met with donors and partners to discuss ways the Department can continue its program of technical assistance to the NBI.

Twelve members of the NBI Equatorial Lakes Subsidiary Action Programme (NELSAP) participated in a two-week water resource management study tour in the U.S. The study tour began in the Washington, DC area and moved west to follow the Columbia River from the Grand Coulee Dam to one of the River's tributaries near Corvallis, Oregon. Two themes were addressed in the context of water resource management: institution building and developing interdisciplinary awareness and coordination. Through seminars and site visits, the study tour group learned how a variety of water resource management and associated organizations operate on a daily basis, including:

- International: The International Boundary and Water Commission, the International Joint Commission, and the World Bank.
- Federal: The U.S. Bureau of Reclamation, the Army Corps of Engineers, the U.S. Fish and Wildlife Service, the National Invasive Species Council, and the Bureau of Indian Affairs.
- Federal/Private: Bonneville Power Administration.
- State and Local: Potomac River Basin Commission, Oregon watershed units.
- University Researchers: Oregon State University.

During these meetings, study tour participants analyzed case studies of water resource management issues for several transboundary rivers in the U.S. Next, the group participated in an in-depth study of the various components of water resource management along the Columbia River, including: river and dam operations; hydropower; flood control; fisheries; indigenous rights; recreation; agriculture/irrigation; aquatic invasive species; international benefits sharing; and transboundary management. DOI-ITAP submitted a status report on the study tour to the U.S. Department of State.

Sub-Saharan Africa

Kenya • Samburu Heartland

The Samburu Heartland is located just north of the equator in the rain-shadow of Mt. Kenya. The Heartland is one of the few areas in Kenya where wildlife numbers outside parks have increased in recent years. DOI-ITAP assisted the African Wildlife Federation (AWF) in planning for management of this area. DOI-ITAP developed a framework for a general management plan for Samburu Game Reserve and the adjoining area. DOI-ITAP also consulted with stakeholders and advised them on outreach, budgeting, and training needs.

Mozambique • Gorongosa National Park

DOI-ITAP worked with the Carr Foundation at Gorongosa National Park to restore and conserve the park's natural resources and develop the site as a viable tourism destination. A DOI-ITAP team traveled to Mozambique to evaluate Gorongosa National Park's technical assistance needs, including those related to the development of the park's hot springs. The team also identified follow-up areas.

Namibia • CITES Capacity Building

The Millennium Challenge Corporation (MCC) has asked DOI-ITAP to provide advice on: (i) the ideal set of safeguards that should be in place to ensure that the Namibian's proposed Indigenous Natural Products project adheres to international standards -- particularly for any CITES listed species that may be included in the activity; (ii) assess the reality on-the-ground of Namibia's ability to adhere to that ideal set of standards; and (iii) advise MCC on language that should be incorporated in the Project compact vis-à-vis appropriate safeguards to ensure compliance with CITES for any CITES listed species that may be included in the activity. Documents detailing findings and recommendations from the assignment have been produced.

Namibia • Natural Resource Tourism Development

DOI-ITAP worked with the Millennium Challenge Corporation (MCC) to provide technical assistance to the Government of Namibia (GON). The GON submitted a Compact Proposal that incorporates tourism and natural resource conservation as part of its larger economic development and growth plan. The MCC enlisted the expertise of DOI to conduct a due diligence assessment of several key areas relating to the tourism and conservation components of the proposal, including:

- Establishment of 11 tourism and information hubs;
- Building of bush-access and 4x4 game-viewing tracks;

- Creation of five new high value game breeding camps;
- Development of 11 new tourism and natural resource management service centers;
- Management of boundary conflict using improved fencing and development of wildlife water points;
- Recovery of natural resource assets; and
- Creation of a tourism house.

A team consisting of DOI-ITAP and USDA Forest Service (USFS) technical experts and MCC staff, conducted an initial assessment of the seven tourism and natural resource conservation components of the Namibian proposal that are listed above, analyzing not only the technical feasibility of the projects, but also the economic and social impacts on the surrounding communities and the environmental impact on affected species and ecosystems. DOI-ITAP and its partners in USFS delivered their report and assessments to MCC. The team concluded that although there were several areas to be worked on in the future, including closing environmental policy and regulation gaps, ensuring compliance with MCC environmental indicators, encouraging investment from the conservancies that are linked to the national parks, and training and planning efforts, the overall proposal was sound. A team of DOI-ITAP and USDA Forest Service (USFS) technical experts and MCC staff conducted a second field assessment to conduct further inquiries into the game breeding camps and an economic analysis of the proposed activities.

South Africa • Richtersveld National Park

Richtersveld National Park (162,445 hectares) is both South Africa's newest park and the only one in South Africa established through a contractual agreement with local communities. The Nama people work in partnership with the National Parks Board to maintain traditional pastoralism and promote and maintain the unique biodiversity in the Park. DOI-ITAP provided technical assistance on livestock grazing management for the Richtersveld Park staff, National Parks Research Unit scientists, and South African university scientists. In addition, the South Africa National Parks Board Scientific Officer in charge of this project visited the U.S. and learned about BLM's policies and management practices regarding rangelands, livestock and vegetation monitoring, remote sensing, and GIS capabilities. Finally, DOI-ITAP provided equipment to help set up a GIS and a biological monitoring system in the Park.

South Africa • Working for Water

DOI-ITAP provided assistance to the National Parks Board of South Africa to develop the Working for Water Project at Table Mountain, Cape Town, South Africa. The project promoted methods of curbing the invasion of non-indigenous species into the Table Mountain area of Cape Town. It is estimated that this project created 600 jobs. An independent, outside evaluation of this project showed that invasive alien vegetation had been cleared effectively, thereby improving the hydrology and biodiversity of a globally significant conservation area. The

project also helped pioneer a model for development in which participants are left empowered to look for work, start a business of their own, or become independent contractors.

South Africa • Southern Africa Environment Web Page

DOI-ITAP provided technical assistance in launching a Southern Africa Environment website. The site provides extensive and current information on developments in South African environmental law and policy in a format useful to environmental NGOs; community-based organizations; provincial and local officials; university/secondary school teachers and students; and the general public. The site (www.saep.org) was officially launched on June 1, 1996, as a follow up to the U.S.-South Africa Binational Commission.

South Africa • Water Convention

DOI-ITAP personnel helped the South African Department of Water and Forestry Affairs develop a strategy to implement major initiatives in water conservation, demand management, and water law with the goal of achieving more equitable distribution of water. DOI-ITAP also supported a workshop on best management practices on water conservation.

Southern Africa • Four Corners

In the African region called "Four Corners," four countries meet near the Zambezi River and the spectacular Victoria Falls: Zambia, Zimbabwe, Botswana and Namibia. A series of parks and game reserves dot the landscape, yet the corridors for migrating wildlife to move between them are not secure. With four countries and four sets of laws and policies, coordination among the four countries for management of the watershed and the wildlife is needed. Fostering this coordination and developing a coherent circuit for tourists—as well as corridors for wildlife—are priorities under the African Wildlife Federation's Four Corners initiative funded by USAID/Regional Center for Southern Africa. DOI-ITAP assessed the project and provided recommendations to address project needs.

Uganda • Mgahinga & Bwindi National Parks

Mgahinga National Park and Bwindi National Park—a World Heritage Site—are located in southwestern Uganda and are home to the remaining 600 or so mountain gorillas left in the world. Both parks also have a wide variety of animal and plant life and offer excellent hiking opportunities along the backdrop of spectacular scenery. Both parks are pockets of wilderness surrounded by densely populated farmlands. Most conservation problems are a result of conflicts over the use of resources—the community and wildland interface. DOI-ITAP provided technical assistance related to tourist infrastructure, park interpretation, and fire management to African Wildlife Foundation's projects in Mgahinga and Bwindi National Parks.

***Uganda* • Queen Elizabeth National Park**

An international biosphere reserve, Queen Elizabeth National Park is one of Uganda's oldest and most visited national parks. It encompasses a wide range of species and habitats, including forest, grassland, wooded savanna, volcanic craters, lakeshore, and a wetland that is protected by the Ramsar Convention. DOI-ITAP worked to improve Queen Elizabeth National Park visitor services and to increase revenue generation through tourism. It trained and equipped field personnel within Uganda Wildlife Authority and Peace Corps Volunteers to engage in park interpretation and to conduct basic biological inventories and monitor user impacts. DOI-ITAP also worked to promote conservation education programs in targeted communities near selected protected areas, including community-level initiatives which encouraged park-compatible economic development adjacent to Queen Elizabeth National Park. The DOI-ITAP visitor satisfaction survey was the first standardized questionnaire used throughout Uganda's national parks.

Asia & the Pacific

Bangladesh • Arsenic Contamination in Bengal Delta Groundwater

Arsenic contamination in the shallow groundwater of the Bengal Delta in Bangladesh and West Bengal, India, is now recognized as the most significant water-related health crisis in the world. The contamination affects 40 to 60 million people. Primary solutions to the arsenic problem in Bangladesh and West Bengal are avoidance and treatment. DOI-ITAP worked to understand the geology, hydrology, and geochemistry of the contaminated delta sediments in order to address existing conditions and evaluate water management alternatives, including remediation of contaminated shallow aquifers and development of deeper aquifers.

Cambodia • Wildlife Law Enforcement

In collaboration with Conservation International (CI) and WildAid, DOI-ITAP provided training for park rangers and protected area managers in areas of DOI expertise, including technical assistance to the CITES Secretariat in Phnom Penh. A DOI-ITAP expert participated in a review team to assess the current state of data and information on the status and condition of Cambodia's forest resources. The DOI-ITAP expert helped develop guidance and methods for the assessment of the current distribution, status, and value of Cambodia's forests and forest lands. A team of two U.S. Fish and Wildlife Service (FWS) experts on the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) traveled to Cambodia to: (1) provide training to Government of Cambodia officials on the implementation of CITES, including appropriate permitting procedures to authorize the international trade in CITES-listed species; and (2) provide assistance in finalizing Government of Cambodia draft legislation for the implementation of CITES.

Through a contract with WWF/TRAFFIC, DOI-ITAP procured needed equipment for the CITES Secretariat. Among other equipment, the office now has a functioning phone, fax and email account. The FWS CITES expert returned to Cambodia to participate in a Government of Cambodia-sponsored review and debate on the draft CITES legislation. DOI-ITAP has worked with Conservation International and TRAFFIC to provide funding to address specific needs.

India • Slope Stability and Coal Mining

DOI-ITAP, in support of the Coal Mining Task Force of the Asia-Pacific Partnership on Clean Development and Climate, assessed slope stability problems occurring on in-pit and out-of-pit overburden spoil piles at Coal India Limited (CIL) surface coal mines; and conduct a slope-stability workshop at the CIL Coal Mine Planning and Design Institute (CMPDI) in Ranchi. A DOI-ITAP team visited and photo-documented five CIL mines at the Western Coal Limited (WCL) and Northern Coal Limited (NCL) coal fields (April 2008). The team also held a three-day workshop at the CIL Coal Mine Planning and Design Institute (CMPDI) in Ranchi in order to exchange knowledge and experiences with CIL engineers on slope stability principles, slope

stability analysis and monitoring techniques, and spoil-fill construction practices. Workshop participants discussed problems encountered at the CIL mine sites and explored several potential remedies. Sixteen CIL employees attended (April 2008). Based on the mine visits and workshop, the DOI-ITAP team was able to identify unique challenges facing CIL as well as inspection gaps. The team provided an overview of available slope stability software, and agreed to share U.S. mining permits and technical information on sampling and testing procedures for spoil and highwall materials.

India • Coal Processing in the Asia-Pacific Region

DOI-ITAP hosted a workshop in India to review existing regulations and practices for coal processing in the Asia-Pacific region and develop recommendations for optimum ash and sulfur reduction in washed coal. This work occurred under the auspices of the Asia-Pacific Partnership on Clean Development and Climate, an effort to accelerate the development and deployment of clean energy technologies. Founding partners (Australia, China, India, Japan, Republic of Korea and the U.S.) agreed to work together and with private partners to meet goals for energy security, national air pollution reduction, and climate change in ways that promote sustainable economic growth and poverty reduction. The Coal Beneficiation and Utilization of Rejects workshop in Ranchi, India was held from August 22-24, 2007. The workshop contributed to three Asia-Pacific Partnership's Coal Mining Task Force projects: "Information Sharing on Coal Processing Technologies", "Fine Coal Beneficiation – Joint Venture Project", and "Joint Venture Project on Waste Coal Management". The workshop included presentations from Indian and U.S. experts on best practices for beneficiation of coal and utilization of rejects (waste coal) including research on washed coals, technologies of washing coal, fine coal beneficiation, and technologies for generation of power from washery rejects.

India • Impacts of Human Activities on Elephants

DOI-ITAP provided equipment—primarily radio telemetry equipment for elephants—to assist in assessing the impact of human activities on ungulate populations in Rajaji-Corbett National Parks. The data gathered was used to identify mini-core areas for protection to maintain the biological integrity of the area and to provide recommendations for eco-restoration and effective management.

Indonesia • Coal Seam Fires

DOI-ITAP provided technical assistance to the Indonesian Ministry of Energy and Mineral Resources to train them in establishing a long-term capability to respond quickly to coal seam fires—particularly those that present a threat to human health and safety, the environment, and infrastructure. Before the project began in October 1998, a significant effort was not being made to put out coal fires. DOI-ITAP helped extinguish fires and trained Indonesian staff on fire-fighting techniques. Fifty-six of the fires DOI-ITAP helped extinguish were in the Sungai Wain

Nature Reserve area—a release area for rehabilitated orangutans. DOI-ITAP taught appropriate personnel methods of suppression that would minimize disruption of the habitat. The Coal Seam Fire Project contributed directly to establishing linkages between the regional Ministry offices (Kanwils) and the provincial and local governments that helped identify and locate coal seam fires.

DOI-ITAP assistance directly prompted a Ministerial Decree on October 7, 1999 that established policy regarding coal fire suppression for the Ministry. The decree clarifies the Ministry's responsibility to extinguish coal fires, assigns the lead for implementing the program to Kanwil offices (regional offices of the Ministry), and authorizes use of the Coal Royalty Fund to support the activities. As a result of the new decree and the publicity the project has received locally, coal fires are now being reported in several other provinces. Most importantly, the Ministry is putting out fires without outside assistance.

Indonesia • Mine Policy

DOI-ITAP provided technical assistance to the Government of Indonesia to support the decentralization process and to build capacity in local governments to manage mineral resource programs at the local level. Through a long-term on-site Project Director on detail from the Department's Office of Surface Mining (OSM) and short-term exchanges of OSM and state-level mining experts, DOI-ITAP provided technical support to the national government and selected provincial and county governments. An intern program and advanced inspector training was provided to appropriate Indonesian professionals to support decentralization efforts and to build local capacity.

Through the Department's Office of Surface Mining, DOI-ITAP:

- Helped relevant Indonesian agencies develop more rational positions on mining and the environment.
- Trained staff on mining, mining impacts, mitigation, reclamation, and minerals management.
- Helped the Indonesian government develop water quality standards for the coal mining industry. Ministerial Decree KepMLH/113/2003 (on coal mining effluent limits) was signed and implemented in July 2003. The decree sets standards for discharges from both mining areas and preparation plants. The standards are similar to those adopted in the U.S. for pH, Iron, and Manganese but are higher for Total Suspended Solids.
- Helped the Indonesian government develop water quality standards for the copper and gold industries. These new standards were promulgated in a Ministerial Decree in October 2004.
- Trained Indonesian staff on the review of environmental impact analyses for mining operations. The entire course (lesson plans and student handouts) was translated into Bahasa, Indonesian. The course continues to be provided by the Government of Indonesia.
- Conducted U.S. study tours to familiarize Indonesian staff with decentralized mining regulation in the U.S. During the visits, the participants visited a number of active mines

(coal/metal and pre-law abandoned mines/superfund sites) and explored such issues as developing and implementing performance standards for mining operations; water quality standards and water discharge permits; and abandoned mine land reclamation and funding.

- Introduced cyanide vat leach technology to small scale miners who have been using mercury amalgamation to recover gold. The conversion from mercury amalgamation to cyanide leaching will—besides being more efficient—greatly reduce the cumulative environmental impacts of mercury discharges to the local river systems and air.

Mongolia • Lake Hovsgol National Park

Lake Hovsgol National Park, part of the Selenge River watershed and a sister lake to Lake Baikal in the Russian Far East, is one of Mongolia's particularly environmentally sensitive areas. The site is experiencing growing tourism interest. The Park boasts several endemic species and also contains two towns, Hatgal (south) and Hanck (north) which function as part of the Park's cultural heritage. At the time of project's inception, the Park was inadequately managed and the communities in and around the Park enjoyed few benefits from their proximity to the Park or its tourism. DOI-ITAP's technical assistance program was designed to build the capacity of Lake Hovsgol National Park staff to better manage the natural resources of the Park, enhance the visitor experience by improving the interpretation program, increase local community involvement in Park decisions and Park-related income generation, and improve staff resources by establishing a visitor fee program.

Some of this project's successes include the development of a new visitor center, the installation of a solar electricity system, and the set-up of a GIS with digitized maps. This project also benefits local communities through the development of community environmental education centers in all communities around the park and the marked improvement of several local school facilities.

Nepal • Shey Phoksundo National Park

Shey Phoksundo National Park is Nepal's largest national park and covers 355,500 hectares. Located in the western part of the Himalayas, the Park is a biological crossroads of the Himalayan mountain range and the Tibetan plateau. Shey Phoksundo National Park also has a unique cultural heritage with one of the highest and oldest permanent settlements of highland agriculture/pastoralism. At the time of DOI-ITAP project's inception, the Park faced threats from unregulated tourism development and unsustainable resource use patterns—driven in part by increasing numbers of porters and outside guides. The program was designed to strengthen environmentally sensitive tourism development, bolster protected area management, build environmental interpretation skills, and encourage sound community-based resource management in and around the Park.

DOI-ITAP worked to enhance park-community relations through the launch of a junior ranger program that continues to thrive today, in addition to partnerships with various businesses to help

them benefit from park tourism. DOI-ITAP trained more than 250 community representatives; civic, religious, and business leaders; teachers; and natural resource professionals on the concepts of community development in association with protected areas. During the four year program, park staff interacted regularly with the DOI-ITAP team and learned about U.S. standards of ethics, professionalism, and dedication to resource management. The Park staff was provided binoculars, bird books, mammal guides, and bird and mammal checklists to help them enhance their job performance. DOI-ITAP also helped develop wildlife monitoring reporting forms for Park staff use. Working with Park staff, local villagers, and religious leaders, DOI-ITAP assisted in the development of the Park's first self-guided nature trail and brochure at Phoksundo Lake.

Philippines • Coral Reef Management Training

DOI-ITAP provided training in coral reef and marine protected area management to resource professionals in East Asia. The participants in the training were from local *Bantay Dagats* (community-based sea watch patrol teams) and NGO representatives who have responsibilities in marine law enforcement in the Philippines near shore waters and marine protected areas. The sessions included training in basic patrol and arrest techniques; collection, preservation, and courtroom presentation of evidence; fish identification; local marine law; interagency coordination; and basic boating and safety. The training complemented the World Wildlife Fund program in the Sulu-Sulawesi Eco-Region. The Sulu Sea contains the most biologically diverse coral resource in the world. The training greatly improved the capacities of the local *Bantay Dagat*. In Mabini and Tingloy, commercial vessels are not encroaching on the municipal waters to the extent they did in the past. As a result, the municipal fishermen are able to catch more fish (both in terms of quantity and species of fish) and do not need to fish as far from the coast. Given the success of the DOI-ITAP training, the U.S. Department of State sponsored 22 Philippine officers to complete a two week “Small Craft Marine Law Enforcement Training Program” conducted at the Federal Law Enforcement Training Center in Brunswick, Georgia.

Section IV: Contacts

AFRICA • Standardized Mapping and Geospatial Database

Roger G. Sayre, Ph.D.
Senior Scientist
Geographic Analysis and Monitoring Program
U.S. Geological Survey, MS-519
Reston, VA 20192
Tel: (703) 648-4529
Email: rsayre@usgs.gov

Roberta Hilbruner, CTO
Tel: (202) 712-5688
Fax: (202) 216-3174
Email: rhilbruner@usaid.gov

CAPE VERDE

Gregory Withee, USGS
Tel: (703) 648-6206
Fax: (703) 648-4227
Email: gwithee@usgs.gov

Ingrid Verstraeten, USGS
Tel: (703) 648-5689
Fax: (703) 648-6687
Email: imverstr@usgs.gov

CENTRAL AMERICA/DOMINICAN REPUBLIC • CITES Capacity Building

Rob Wing
Chief, Environment and Trade Division
Office of Environmental Policy, OES
U.S. Department of State
2201 C Street NW
Washington, DC 20520
Tel: (202) 647-6780
Fax: (202) 647-5947
Email: WingRD@state.gov

Zeenat Syed
Office of Environmental Policy, OES
U.S. Department of State
2201 C Street NW
Washington, DC 20520
Email: syedZM@state.gov

Crawford Allan
Director (Acting), TRAFFIC North America
World Wildlife Fund
1250 24th Street NW
Washington, DC 20037
Tel: (202) 778 9517
Email: Crawford.allan@wwfus.org

Jill Hepp
Program Officer
TRAFFIC/WWF
1250 24th Street NW
Washington, DC 20037
Tel: (202) 778-9699
Fax: (202) 775-8287
Email: jill.hepp@wwfus.org

Marta M. Prado
Executive Director, International Trade and Development
Humane Society International
2100 L Street NW
Washington, DC 20037
Tel: (202) 293-5105
Fax: (202) 293-5109
Email: mprado@hsi.org

CENTRAL AMERICA/DOMINICAN REPUBLIC • Mining EIAs

Rob Wing
Chief, Environment and Trade Division
Office of Environmental Policy, OES
U.S. Department of State
2201 C Street NW
Washington, DC 20520
Tel: (202) 647-6780
Fax: (202) 647-5947
Email: WingRD@state.gov

Alfred E. Whitehouse
Office of Surface Mining
Tel: (202) 208 2868
Fax: (202) 408 8412
Email: awhitehouse@osmre.gov

Zeenat Syed
Office of Environmental Policy, OES
U.S. Department of State

2201 C Street NW
Washington, DC 20520
Email: syedZM@state.gov

GEORGIA • Protected Areas Development

John Hansen
USAID/Georgia
25 Atoneli Street
Tbilisi, 0105 Georgia
Tel: 011-995-32-92-28-44 (office)
202-216-6272 (VOIP line 9am-6pm Caucasus time [9 hours ahead of EST])
Tel: 011- 995-32-31-30-58 (home)
Tel: 011- 995-99-56-69-56 (mobile)
Email: jhansen@usaid.gov

Marc Weitzel
U.S. Department of the Interior
U.S. Fish and Wildlife Service
Tel: (805) 644-5185
Fax: (805) 644-1732
Email: marc_weitzel@fws.gov

Paata Shanshiashvili
Georgia Protected Areas Development Center
9 Veriko Anjaparidze str. V fl
Tbilisi 01 79, Georgia
Tel: 011-995-99-572184 (mobile)
Tel: 011-995-32-75-23-56 (office)
Tel: 011-995-32-37-17-23 (home)
Email: pshanshiashvili@internet.ge, pshanshiashvili@yahoo.com

INDIA

Sarah E. Evans
Office of Global Change
U.S. Department of State
Tel: (202) 647-1863
Fax: (202) 647-0191
E-mail: evansse2@state.gov

Alfred E. Whitehouse
Office of Surface Mining
Washington, DC
Tel: (202) 208 2868
Fax: (202) 408 8412
Email: awhitehouse@osmre.gov

JORDAN

Maha Mousa
Program Management Specialist
Office of Economic Growth
USAID/Jordan
Tel: 011-962-6-590-6631
Tel: 011-962-07-9641-4161 (mobile)
Fax: 011-962-6-592-0143
Email: mmousa@usaid.gov

KENYA

Charles Oluchina
Natural Resources Management/Biodiversity Specialist
USAID/Kenya
PO Box 629
Village Market 00621,
Nairobi, Kenya
Tel: 011-254-20-862-2841
Fax: 011-254-20-862-2680/1
Email: coluchina@usaid.gov

MIDDLE EAST/NORTH AFRICA

Greg Howell
Foreign Affairs Officer
Middle East Partnership Initiative
U.S. Department of State
NEA/PI, Room 6258, HST
2201 C Street NW
Washington, DC 20230
Tel: (202) 776-8572
Fax: (202) 776-8445
Email: HowellGG@state.gov

Rob Wing
Chief, Environment and Trade Division
Office of Environmental Policy, OES
U.S. Department of State
2201 C Street NW
Washington, DC 20520
Tel: (202) 647-6780
Fax: (202) 647-5947
Email: WingRD@state.gov

MONGOLIA • Water Supply

Ingrid Verstraeten, USGS
Tel: (703) 648-5689

Fax: (703) 648-6687
Email: imverstr@usgs.gov

MOZAMBIQUE • Tourism Development

Kwasi Agbley
Nathan Associates
Tel: (258) 82 561 3261 (mobile)
Tel: (011) 258 82 561 3261

Timothy Born
USAID/Mozambique

MOZAMBIQUE • Water and Sanitation

Ingrid Verstraeten, USGS
Tel: (703) 648-5689
Fax: (703) 648-6687
Email: imverstr@usgs.gov

PHILIPPINES

Dan Moore
Chief, Office of Environmental Management
USAID/Philippines
8th Floor PNB Financial Center, Roxas Blvd.
Pasay City
Fax: (632) 552-9997
Email: dmoore@usaid.gov

Oliver Agoncillo
USAID/Philippines
Email: oagoncillo@usaid.gov

Asis Perez, Attorney
DOI-ITAP In-Country Representative
Cell: 011-639209106394
Email: Perezasis@yahoo.com

TANZANIA

Juniper Neill
USAID/Tanzania
Tel: 011-255-51-110764; 117537
Fax: 011-255-22-2117537
Email: jneill@usaid.gov

Gilbert Kajuna, CTO
USAID/Tanzania
Tel: 011-255-51-110764; 117537

Fax: 011-255-22-2117537

Email: gkajuna@usaid.gov

DEC

Email: docsubmit@dec.cdie.org

EGAT

Email: RVolk@usaid.gov